



CYTOLOGY LIQUID TRANSFER
BIOPROCESSING SOLUTIONS
BIOBANK SYSTEM

CONSUMABLES

PHARMA PACKAGING

REAGENT

NEST

MEDICAL LABORATORY CONSUMABLES
YOUR BEST CHOICE FOR

SERVICES

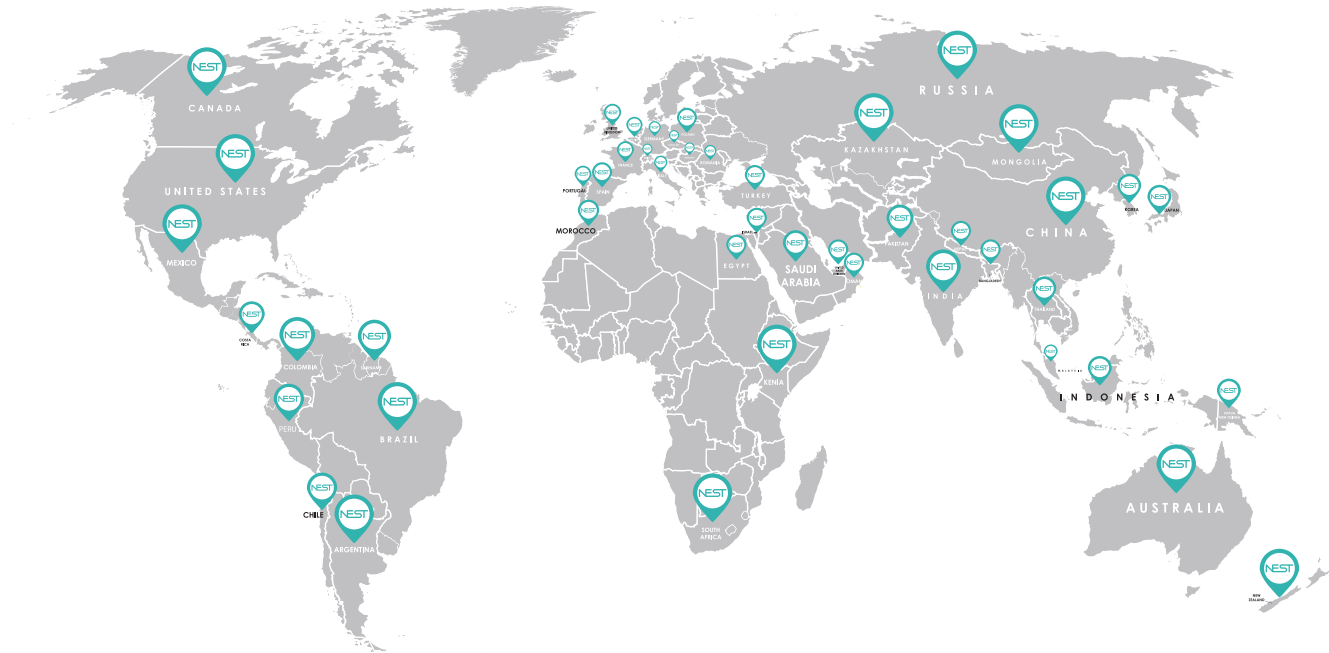
APPARATUS

MOLECULAR BIOLOGY
CELL CULTURE PRODUCT
MEDICAL CONSUMABLES
BACTERIA
OTHER

NEST Biotechnology is dedicated to offering customers high-quality products and reliable technical services. Recognizing that each customer has different needs, we provide a variety of options to meet diverse requirements.

NEST International

Discover the latest updates on NEST through the following channels!



NEST YouTube Channel

Have you followed NEST's social media channels yet? Stay tuned with the latest advancement in technology and industry, access in-depth product details, and find helpful notes or instructions for your daily tasks.

Scan the QR code to
watch our videos!



YouTube



NEST on Social Media Platforms

Have you followed NEST's social media channels yet? Stay tuned with the latest advancement in technology and industry, access in-depth product details, and find helpful notes or instructions for your daily tasks. Stay informed and don't miss out on any appealing webinars or marketing events!

Follow us now! Have fun!

Real-time updates:



We: NEST Biotechnology Co., Ltd.



NEST Biotechnology @NESTBiotech



nebstbiotechnology





Have you checked out the new designs and functions on our website?



[COA/COC
Download](#)



[Documents
Download](#)



[Cross-Reference
Tool](#)



[PCR Product
Compatibility
Reference Tool](#)



[Closed System
Customization](#)

Exploring more in-depth information?

Missed out specific details?

Scan the QR codes above to experience NEST online services.

You can also visit <https://www.cell-nest.com/>

Contents

 COMPANY PROFILE 01-08	Company Profile	01-02	 BIOBANK SYSTEM 45-60	Cryogenic Tubes	46-49
	Development History	03-04		SBS Format Cryogenic Tubes	50-51
	Custom Closed System Service	06		Cap Inserts / Cryogenic Box	52
	Organoid Culture Solution	06		Vertical Freezer Racks	53
	New Arrival	07		Sample Freezing Recommendations	54
	Enterprise certificate	08		Sample Management Software	55
 CYTOLOGY 09-19	Cell Culture Plate	10-11	 LIQUID TRANSFER 61-82	Single-Rack Reader	56
	Cell Culture Insert	12-13		Multi-Rack Reader	57
	Glass Bottom Cell Culture Dish & Plate	14		Handheld Decapper for Cryogenic Vials	58
	Cover Glass	14		Cell Thawing Device	59
	Cell Culture Slide	15		Label Printer	60
	Cell Culture Dish	16		Automation Tips	62-63
	Cell Culture Flask	17		Low-Binding Universal Tips	64
	Cell Strainer	18		Pipette Tips	65-66
	Cell Scraper	19		Stackable Tip Refill	67
	50mL Mini Bioreactor	19		Vacuum Filtration System	68-69
 BIOPROCESSING SOLUTIONS 20-44	Sterile Connector	21		Adaptor for Vacuum Filtration System	70
	Quick Connector Collection	22		Syringe Filter	71
	Bioprocessing Closed System Solution	23		Microcentrifuge Tube	72
	Bioprocessing Closed System	24-32		Centrifuge Tube	73
	Erlenmeyer Flask	33-35		Reinforced Centrifuge Tube	74
	Erlenmeyer Flask, High Efficiency ..	36		Peripheral Blood Lymphocyte Separation Tube	75
	BioFactory	37-39		250/500 mL Centrifuge Tube	76
	Square Storage Bottle	40		Cluster tube	77
	Carboy	41		Reagent Reservoir / Reservoir	78
	TriSteri™	42-44		Pasteur Pipette	79
				Serological Pipette	80
				Round Storage Bottle	81
				Screw Cap Microcentrifuge Tubes ...	82

 MOLECULAR BIOLOGY 83-95	ELISA Plate	84
	Deep Well Plate	85-87
	8-Strip PCR Tube & Tube & Cap ...	88-89
	PCR 96 Well Plate	90-91
	PCR Rack / PCR Sealing Film / PCR	
	Scraper	92
	Petri Dishes	93-94
	Innoculating Needles / Loops L-Spreader	95

CELL CULTURE PRODUCT	GelNest™ Matrix	97-100
	Serum Free Supplement / Growth	
	Factor	101
	Fetal Bovine Serum	102-103
	RPMI 1640 Medium / DMEM	
	High-Glucose Medium	104
	α-MEM Medium	105
	Cell Cryopreservation Reagents / Cell	
	Digestion and Dissociation Reagents	106
	Antibiotics and Mycoplasma Removal	
	Reagent / Balanced Salt Solution,	
	BSS	107
	Quick-KO®	108



PHARMACEUTICAL PACKAGING

109-125

TSA Disposable Pen Injector	112
Disposable Pen Injector	113
Self-locking Pen Injector (100 IU) /	
Disposable Fixed-dose Pen Injector	114
Prefilled Automatic Pen Injector (Two	
Step)	115
Prefilled Automatic Pen Injector (Three	
Step)	116
Pen Injector	117
In-house Tooling & Flexible	
Customization	118
Product Introduction	119
Cartridge Assembly for Pen-injectors	120
COP Pre-filled Syringe	121-122
Pre-filled Disposable Glass Intranasal	
Atomization Device	123-124
AccureVia® COP Bottle	125

 MEDICAL CONSUMABLES 126-132	Disposable Intranasal Atomization	
	Device	127-128
	Saliva Collection Kits / Dry Saliva	
	Collection Kits	129
	Saliva/gargle Collection Kit	130
	Disposable Swab	131
	Viral Transport Medium / Inactivation	
	Transport Medium	132

OTHER	Nitrile Examination Glove	134
	Nonwoven Mask / Mushroom Cap /	
	Non-woven Shoe Cover	135
	Centrifuge / Mini Dry Bath	136
	7° Digital Nutating Mixer / Mini	
	Vortex Mixer	137
	Variable Speed Tube Revolver with Digital	
	Display	138
	CO ₂ Orbital Shaker	139
	Standard Mini Roller	140
133-141	Pipette	141

COMPANY PROFILE

A leading life science plastic consumables manufacturer.

Established in 2009, Wuxi NEST Biotechnology Co., Ltd. (NEST) is renowned for its brand "NEST" and is dedicated to the research, development, and manufacturing of high-quality life sciences products. As our International business expands, our products have been successfully exported to numerous countries such as North America, Europe, Japan, Korea, India, and more.

2011, NEST passed the standard of the quality management system of ISO 9001.

2014, NEST passed the standard of the quality management system of ISO 11137.

2016, NEST passed the standard of the quality management system of ISO 13485.

2020, NEST obtained the medical device production license.

In addition to these certifications, we also gained CE and FDA standards.

NEST Scientific Inc. (USA)

With the development of the business, we have established deep cooperation and built strong relationships with overseas customers in order to send the products to customers in North America more quickly. Nest Scientific Inc., a branch of Wuxi NEST Biotechnology Co., Ltd., was established in New Jersey, the USA in 2013. Composed of a professional team with rich experience in training and sales skills, NEST Scientific USA can provide professional training as well as great communication with customers in-depth in order to understand customers' demands better and quicker. In 2022, NEST is opening a new 48,000ft² warehouse located in Phoenix, AZ. This new warehouse allows for more space to receive in and stock items as well as lower shipping costs for distributors on the west coast.

To further expand our footprints globally, and to respond the request to more timely service from NEST's accumulating industrial customers including CDMOs, vaccine plants and third-party testing companies, etc., we are setting up subsidiaries in Netherlands, UAE and Japan to duplicate our US successful experience.



Overseas Branches

NEST brand is continuously expanding its overseas market. With a steady increase in overseas business volume, NEST's presence has extended to the Americas, Europe, the Middle East, and East Asia. In 2013, the US branch was officially established, and a new warehouse was completed in the US in 2022. Additionally, NEST has subsidiaries in Rotterdam, the Netherlands; Sharjah, the United Arab Emirates; and Tokyo, Japan. These subsidiaries have successfully provided integrated storage, transportation, and sales services, ensuring NEST brand's supply in overseas markets. Currently, NEST products are sold in many countries worldwide, including North America, Europe, Japan, South Korea, and India.

Customized Consumables

NEST offers a wide range of consumables, including plates, bottles, dishes, tubes, and other cell culture consumables. You can freely choose our standardized products in specific packaging or request customized solutions such as closed systems. Should you have any requirements, please feel free to contact us.



Wuxi NEST Biotechnology Co., Ltd.



Development History

Dreams took shape

2009

The brand "NEST" was established and the supplies for cell cultivation were under development.



We offered:
Cell Culture Plates: 6/24/ 96 well
Cell Culture Flask: T25/T75
Cell Culture Dish:
35mm/60mm/90mm

2010

Exploring Overseas Markets
Attended impactful events including Analytica and Pittcon, ready to release Liquid Transfer collection.



New Releases:

- Centrifuge Tube collection:
0.6mL/1.5mL Micro-centrifuge Tube,
15mL/50mL Centrifuge Tube
- PCR collection: Single PCR
Tube/8-tube PCR Strip/96-well PCR
Plate

2011

Successfully obtained ISO 9001 certification.

2012

Preparations were made for the new site.

2013

The new site was put into operation.
NEST USA was officially established.
The Molecular Biology collection was introduced.
Additionally, the development of BioFactory was initiated.

2014

The newly constructed workshop, covering an area of 27,000 m², was officially inaugurated.
Introduced the Reusable Pen Injector Incorporated Rhodotron TT200 E-beam irradiation equipment from Belgium
Sterilization Center obtained ISO11137 certification.



2010-2014

Carefully preparing for Cell Culture and Liquid Handling collection.

We offered:

- Cell Culture Plate: 48/384-well Plate, 96-well U-shape/ V-shape Bottom Plate
- Pipette Tips with comprehensive specifications ranging from 10 to 1000uL
- Cryogenic vials, both internal and external threaded, with comprehensive specifications ranging from 0.5-4.8mL

Eagerly pioneering

2015

The Irradiation Center was officially operational.

2016

Successfully obtained ISO 13485 certification.
BioFactory collection was verified and released.

2017

Enhanced the product portfolio for industrial clients.



2015-2017 Continued to elevate the product portfolios
We released collections of BioFactory, Erlenmeyer Flask, and Reusable Pen Injector.

2018

Pioneered the medical device field by developing.
China's first nasal spray delivery device for vaccines, and initiated the application for Class II Medical device certification.



2019

Obtained the Medical Device Production License
Surpassed a sales volume of one billion.



2019: Released the collection for suspension culture and accelerated the development of pharmaceutical containers.

Erlenmeyer Flask: PETG Erlenmeyer Flask and High Efficiency Wide-Mouth Erlenmeyer Flask.

Vacuum Filtration System with PES and PVDF membrane.

Automation Pipette Tips

Pharmaceutical containers: the program for the Pre-filled Intranasal Atomization Device.

2020

Engaged in the front line of epidemic prevention and continuously elevated our collections of laboratory consumables.



We developed:

Sterile and disposable swabs, Disposable samplers with VTM, ITM, UTM and a comprehensive collection of Deep Well Plates.

Proactive innovation

2021

Crafting the Plan for a Global NEST Added a 3300m² Warehouse and R&D Center in New Jersey, USA



Bio-processing collection was officially launched.

New Arrivals: PETG Square Storage Bottle and PC Erlenmeyer Flask.

Closed System Solutions: The Transfer Cap collection was released, along with Generic accessories, including Quick Connector and Aseptic Connector.

2022

Crafting the Plan for a Global NEST Added a 4500m² Warehouse in Arizona, USA Established subsidiaries in the Netherlands, UAE, and Japan.

2023

Elevated the entire portfolio Committed to building a comprehensive solution system of tools and services.



Including:

Biobank collection: Cryogenic Tubes, Biobank Sample Management Software, Vertical Freezer Rack, and related equipment.

Pharmaceutical Containers: Pre-filled Syringe, Pre-filled Intranasal Atomization Device, and Disposable Pen Injector.

Reagent: GelNESTTM Matrix, Fetal Bovine Serum (FBS), and regular medium for Cell Culture, etc.

2025

New Facility Launched, Advancing Smart Manufacturing

New life science campus officially in operation, featuring a 2,300 m² pen injector controlled workshop Fully Automated Assembly Lines High efficiency for premium product manufacturing

General Accessories: Expanded with high-flow size options to enhance the product range

Pharmaceutical Packaging Series: TSA disposable pen injectors, prefilled automatic pen injectors, COP prefilled syringes

Low-binding Tips: Officially launched with ultra-low adsorption and multiple packaging options available



Embracing A Brighter Future

2026

NEST'S PLAN

Continuously expand the RTU pharmaceutical packaging product pipeline

Ongoing launch of updated general accessories

Continuous optimization and expansion of mature consumables

Release of comparative validation reports for multiple products

Ongoing development of a world-class life science campus



Your best choice for medical laboratory consumables.

NEST is dedicated to researching and developing innovative plastic consumables suitable for life sciences research and medical establishments. There are more than 600 plastic consumables that can be widely used for cell culture, molecular biology, immunoassays, liquid handling, and storage such as cell culture plates, Erlenmeyer flasks, BioFactory, pipette tips, etc. More than 100 medical plastic consumables and reagents can be used in molecular diagnosis and vaccination, such as disposable samplers, transport media, swabs, nucleic acid extraction kits, and disposable intranasal atomization devices. In order to provide a more comprehensive and convenient service, we work closely with our affiliated company Wuxi Tech-star Technology Co., Ltd. We also provide lab instruments such as centrifuges, metal baths, BioBank, etc.



Quality Guaranteed Experienced team & a complete plastic consumables production line.

A complete plastic consumables production line is in NEST's possession, where all the procedures from mold-making, injection molding to sterilization, are done efficiently in our own factory. Precision molds, high-quality raw material, and advanced equipment are in position to manufacture products and perform quality testing under strict and comprehensive rules, ensuring our products meet the highest quality and performance standards expected by hospitals, research institutions, and industrial, clinical laboratories, to which we supply products.

- **Excellent mold-making ability.**

With over 30 years' experience, our senior R&D team utilize high-quality mold-making equipment imported from Germany in combination of professional mold analysis software to accomplish precision molds development tasks.

- **Injection molding in Class 10,000 and Class 100,000 cleanroom in strict quality control.**

Owing to the 2700 m² Class 10,000 cleanroom and 6800 m² Class 100,000 cleanroom, all-electric high-speed injection molding machines imported from Japan and the raw material which is in line with USP Class VI requirements, production and quality control are performed strictly in accordance with the corresponding SOP.

- **Sterilization by electronic beam irradiation.**

The Rhodotron TT200 electron accelerator, whose sterilization process has been certified by the ISO 11137 quality system, was imported from the IBA company, a world leader in the E-Beam sterilization industry in Belgium. Compared with sterilization by cobalt 60 or ethylene oxide sterilization, sterilization by electronic beam irradiation is more efficient and safer which requires less time and will not produce any chemical residue.

Organoid Culture Solution

NEST Biotechnology is dedicated to offering customers high-quality products and reliable technical services. Recognizing that each customer has distinct needs, we provide a variety of options to meet diverse requirements.

Core Services



Organoid Culture and Validation: With our extensive expertise and cutting-edge technology, we offer professional and efficient organoid culture and verification services, ensuring the precision and reliability of the experimental results for our clients.

Core Products



We offer a wide range of reagent products, including membrane matrix, culture medium, growth factors, ensuring customers the best support and reliability during the research procedures.

- Membrane matrix
- Recombinant growth factors
- Maturation and maintenance mediums
- Culture supplements

.....



Differentiation Kits

We offer a wide selection of differentiation kits designed to cater to specific needs across various fields, providing customers with convenient and efficient solutions for their research needs.

- Cerebral Organoid Kit
- Liver Organoid Kit
- Intestinal Organoid Kit

.....



Our organoid collection offer cutting-edge solutions that elevate customers' research experiences and expertise.

- Cerebral organoids derived from iPSCs
- Bile duct cancer organoids
- Lung cancer organoids
- Breast cancer organoids
- Recombinant growth factors
- Culture supplements

.....



Surface pretreatment consumables: By pretreating the surface of consumables, make them more suitable for 3D culture.

- Ultra-low attachment Cell Culture Plate
- Ultra-low attachment Cell Culture Flask
- Ultra-low attachment Cell Culture Dish

.....

2026 New Arrival

Pen Injector Production Line & Supporting Products Overview



General Accessories for Biopharmaceutical Processes





ISO 9001



ISO 13485



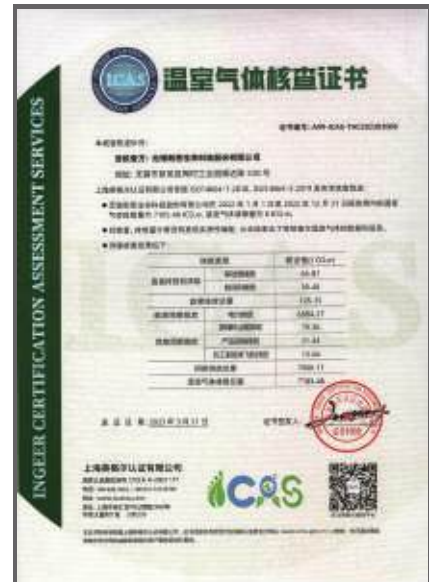
ISO 11137



FDA



EU Quality Assurance Certificate (MDR)



Greenhouse Gas Verification Statement



Certification for Specialized and Sophisticated Enterprises with Innovative Products



Medical Device Registration Certificate of PRC



Cytology

Third-party cell culture testing reports available

Cell Culture Plate



- Sterilized by E-beam, SAL=10⁻⁶.
- High clarity, 100% virgin polystyrene.
- The configuration complies with the ANSI-SBS format.
- The plate lid is designed with cut corners and a condensation ring, reducing the risk of contamination.
- Non-Pyrogenic, DNase/Rnase free.

- The bottom is flat and clear, with each hole labeled for easy differentiation.
- The plate features a non-slip ridge on the side for easy gripping, while the protruding points on the bottom help to prevent noise during transfer.

*The TC-treated ones are intended for adherent cell culture, while the non-treated ones are suitable for suspension cell culture.



Low Evap EDGE Cell Culture Plate

Grooves are designed at the edge of the culture plate to help cells maintain their optimal state during cell culture. They provide a stable temperature and balanced humidity environment for the plate, which reduces or eliminates edge effects and ensures uniformity in cell growth.



Black/White Clear Bottom Cell Culture Plate

- The bottom of the wells is made of high-transparency PS material, ensuring uniform thickness and excellent light transmission performance. This material avoids optical distortion even under high magnification microscopy. On the other hand, the well walls are made of light-shielding PS material to prevent cross-contamination.
- Plates with a black frame are commonly used for fluorescence detection, while plates with a white frame are typically used for luminescence detection. Occasionally, white-framed plates are also used to enhance fluorescence signal intensity.



Individually Packaged



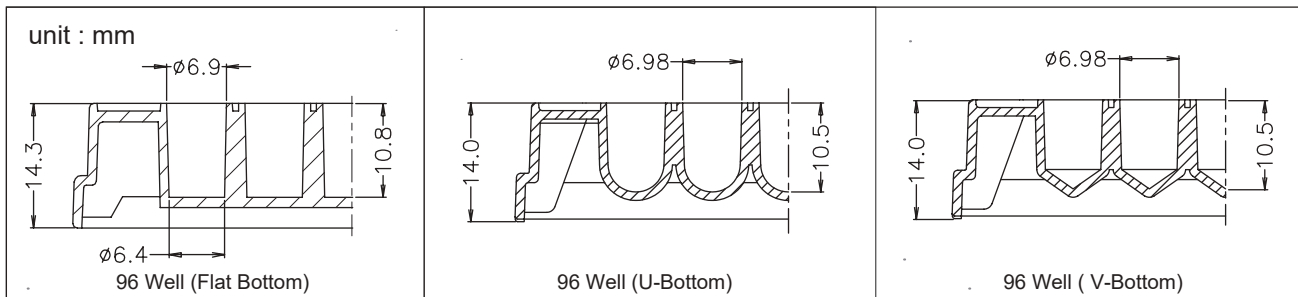
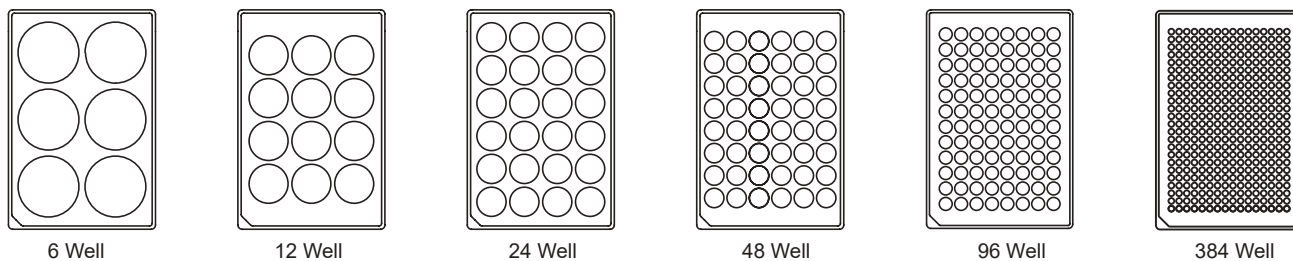
Plastic Bag Package

Product	Recommendation Experiment-Bottom Reading	Notes
White, transparent bottom	• Colorimetric Assay/ Absorbance • Chemiluminescence Method	Cellular visualization operations permitted in cell detection and analysis experiments.
Black, transparent bottom	• Fluorescence Intensity Method (FI) • Fluorescence Resonance Energy Transfer (FRET)	

Cell Culture Plate

Well Number	Cell Growth Area (cm ²)	Recommended Medium Volume (mL)	Bottom Type	Colour	Packaging	/Pack	/Case	Cat. No.	
								TC Treated	Non-Treated
6 Well	9.5	1.9-2.9	□	Clear	Individually Packaged	1	50	703001	703011
					Plastic Bag Package	10	50	703002	703012
6 Well Low Evap EDGE Plate					Individually Packaged	1	50	714011	714001
12 Well	3.6	0.76-1.14			Individually Packaged	1	50	712001	712011
					Plastic Bag Package	10	50	712002	712012
24 Well	1.9	0.38-0.57			Individually Packaged	1	50	702001	702011
					Plastic Bag Package	10	50	702002	702012
48 Well	0.88	0.19-0.285			Individually Packaged	1	50	748001	748011
					Plastic Bag Package	10	50	748002	748012
96 Well	0.32	0.1-0.2	□	Clear	Individually Packaged	1	100	701001	701011
					Plastic Bag Package	10	100	701002	701012
	0.66		U		Individually Packaged	1	100	701101	701111
	0.41		V		Individually Packaged	1	100	701201	701211
	0.32		□	White	Individually Packaged	1	100	701301	701311
				Black	Individually Packaged	/	/	701601	701611
96 Well Clear PS Bottom	0.32	0.1-0.2	□	White, transparent bottom	Individually Packaged	1	30	701701	701711
				Black, transparent bottom	Individually Packaged	1	30	701401	701411
96 Well Low Evap EDGE Plate	0.32	0.1-0.2	□	Clear	Individually Packaged	1	100	713011	713001
				White	Individually Packaged	1	100	713311	/
384 Well	0.11	0.025-0.05	□	Clear	Individually Packaged	1	100	761001	761011
					Plastic Bag Package	10	100	761002	761012
				Black	Individually Packaged	1	100	761301	761311
				White	Individually Packaged	1	100	761601	761611

Technical Drawing of Cell Culture Plates



Cell Culture Insert

Cell culture inserts are widely used in cell experiments, such as co-culture, chemotaxis, cell migration, invasion, and drug transport studies. The permeable support can effectively improve the culture of polarized cells, as it allows secretion and absorption of molecules from both the basal and apical surfaces, thereby supporting metabolism in a more natural manner. This enables the cultivation of certain specialized cell lines while closely mimicking the in vivo environment.

Features

- Innovative edge design: easy sample addition
- PC membrane: low-binding, minimizing the loss of small proteins and other compounds
- PET membrane: superior optical clarity, facilitating observation of cell status
- Compatible with most solvents used in fixation and staining



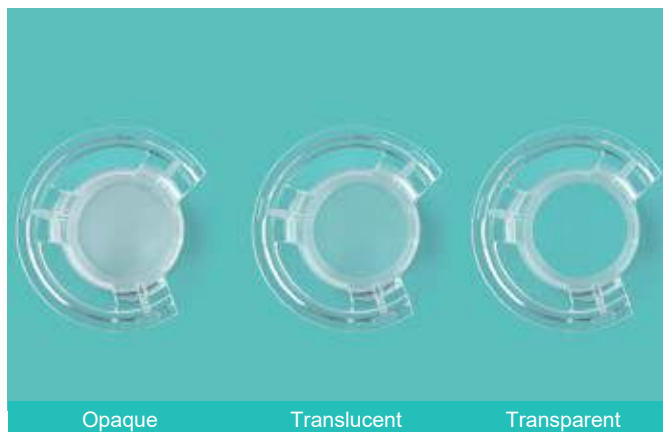
6 Well Plate



12 Well Plate



24 Well Plate



Opaque

Translucent

Transparent

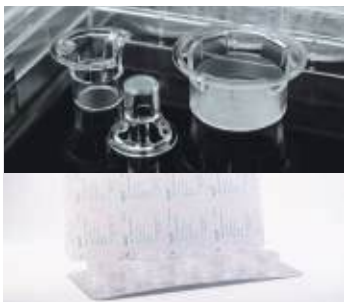


100mm Cell Culture Insert

Application Directions and Types

Applications	Cells	Pore Size
ADME (compound transport across intestinal epithelial cell monolayers, permeability assays)	Caco-2, MDCK	0.4 μm
Co-culture and cell differentiation, cell imaging	Primary cells, stem cells	0.4 μm , 1.0 μm
Macromolecule or virus transport and separation		1.0 μm , 3.0 μm
Cell migration and invasion (angiogenesis), cell-cell interactions (migration) or trans-endothelial migration; chemotaxis assays; co-culture	Endothelial cells, leukocytes, neurons	3.0 μm
Cell migration and invasion	Macrophages, giant cells	3.0 μm , 5.0 μm
Tumor cell migration and invasion; leukocyte-endothelial cell interaction; endothelial cell proliferation; co-culture	Tumor cells, leukocytes, tumor stem cells, MSCs	8.0 μm

Product Specification

	Specifications	Insert (Pcs/Plate)	Insert Diameter (mm)	Volume of Each Well (mL)	Inner Volume of Insert (mL)	Membrane Growth Area of Insert (cm ²)
	6 Well Plate	6	24	2.6	1.5	4.67
	12 Well Plate	12	12	1.5	0.5	1.12
	24 Well Plate	12	6.5	0.6	0.1	0.33
	100mm Dish	1	75	13	9	44
Cell Culture Insert	Pore Size of Membrane (μm)	0.4	1.0	3.0	5.0	8.0
	Membrane Density (Well/cm ²)	1x10 ⁸	2x10 ⁷	2x10 ⁶	4x10 ⁵	1x10 ⁵

Order Information (Insert+Plate Configuration)

Note: The inserts are TC-treated. Please refer to the table below to check if the plates are also TC-treated.

Pore Size (μm)	Description	Packaging	PC Membrane			PET Membrane		
			Transparence	TC Treated	Non-Treated	Transparence	TC Treated	Non-Treated
0.4	6 Cell Culture Inserts + 6 Well Plate	4	Opaque	723101	723111	Opaque	723121	723131
	12 Cell Culture Inserts + 12 Well Plate	4	Opaque	724101	724111	Opaque	724121	724131
	12 Cell Culture Inserts + 24 Well Plate	4	Opaque	725101	725111	Opaque	725121	725131
1	6 Cell Culture Inserts + 6 Well Plate	4	Opaque	/	/	Opaque	723421	723431
	12 Cell Culture Inserts + 12 Well Plate	4	Opaque	/	/	Opaque	724421	724431
	12 Cell Culture Inserts + 24 Well Plate	4	Opaque	/	/	Opaque	725421	725431
3	6 Cell Culture Inserts + 6 Well Plate	4	Translucent	723001	723011	Translucent	723021	723031
	12 Cell Culture Inserts + 12 Well Plate	4	Translucent	724001	724011	Translucent	724021	724031
	12 Cell Culture Inserts + 24 Well Plate	4	Translucent	725001	725011	Translucent	725021	725031
	100 mm Cell Culture Insert-Dish	10	Translucent	726001	/	Translucent	/	/
5	12 Cell Culture Inserts + 12 Well Plate	4	Translucent	724201	724211	Translucent	/	/
	12 Cell Culture Inserts + 24 Well Plate	4	Translucent	725201	725211	Translucent	/	/
8	6 Cell Culture Inserts + 6 Well Plate	4	Translucent	723301	723311	Transparent	723321	723331
	12 Cell Culture Inserts + 12 Well Plate	4	Translucent	724301	724311	Transparent	724321	724331
	12 Cell Culture Inserts + 24 Well Plate	4	Translucent	725301	725311	Transparent	725321	725331

Cell Culture Inserts (Individual Blister Package)

Pore Size (μm)	Specification	Description	Packaging	PC Membrane		PET Membrane	
				Transparence	TC Treated	Transparence	TC Treated
0.4	6 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	/	/	Opaque	723122
	12 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	/	/	Opaque	724122
	24 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	/	/	Opaque	725122
8	24 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	Translucent	725302	/	/

Glass Bottom Cell Culture Dish & Plate

NEST glass bottom series are applied in confocal microscope, high resolution microscope, differential interference contrast microscope, polarized light microscope and phase contrast microscope for cell observation.

Features

- Can be used for live cell observation.
- Special bottom design for easy grip.
- Round cover glass inserts for good appearance.
- Medical adhesive glue to guarantee non-cytotoxicity.
- Sterilized by E-beam, SAL=10⁻⁶.
- Made of high clarity, 100% virgin polystyrene and high clarity glass as bottoms.
- High quality cover glass of standard thickness.



Glass Bottom Culture Dish

Type (mm)	Glass Diameter (mm)	Cultivation Area (cm ²)	TC	Cat.No.	
				10/Pack 200/Case	Blister package Cat.No. 1/Pack 20/Case
28.2	15	6.2	Yes	801002	801022
28.2	20	6.2	Yes	801001	801021



Glass Bottom Culture Plate

Spec (Well)	Glass Diameter (mm)	Cultivation Area (cm ²)	TC	/Pack	/Case	Cat.No.
6	34.8	9.5	Yes	1	10	801004
24	15.6	1.9	Yes	1	10	801006



Cover Glass

Features

- High quality glass, non-cytotoxic.
- Sterile, non-treated.
- Manufactured in class 100,000 clean room.
- Resistant to organic solvent.
- Autoclavable.
- Suitable for used in confocal experiment.
- Each package has a spare quantity to balance the loss during transportation and use.



Glass Diameter (mm)	Thickness (mm)	/Pack	Application	Cat.No.
14	0.17	100	24 Well Cell Culture Plate	801010
15	0.17	100	24 Well Cell Culture Plate	801007
18	0.17	100	12 Well Cell Culture Plate	801011
20	0.17	100	12 Well Cell Culture Plate	801008
25	0.17	100	6 Well Cell Culture Plate	801009

Tips:

Sterilization: If the glass needs to be sterilized after a long period of non-use, it is recommended to wrap it in tin foil and sterilization it at 180°C in a metal container for two hours.

Coating: Coating can be done with polylysine, collagen, extracellular matrix, and some commercially available reagents containing layer adhesive protein, fibronectin, and proteoglycan, which can improve cell adhesion.

Cell Culture Slide

Product Overview

NEST Cell Culture Slides are designed for various cell-based experiments and are also useful for virus, toxicity tests and immunocytological experiments. Cell Culture Slides provide removable chamber that enables cell growth directly on the microscopic slide, convenient for staining and microscopic examination without transferring cells. Chambers with various well numbers and colors are available for different applications.

Features

- Bottom materials: Glass (no surface treatment for glass bottom), naturally charged, good growth surface for adherent cells.
- Convenient for microscopic observation.
- Chamber color: Clear/White/Black.
- Easy open flip for chamber & slide disassembly.
- No chemical adhesives used.
- Designed to prevent cross contamination.
- Alphanumeric labeling.
- Packing trays can be used as incubation racks in CO₂ incubators.
- Sterility, No Cytotoxicity, Non-Pyrogenic, RNase/DNase Free, Human DNA Free.



230101



230102



230104



230108



230121



230122



230124



230128



230111



230112



230114



230118

Cell Culture Slide

Number of Wells	Growth Area/ well (cm ²)	Working Volume/ Well (mL)	Color	Material (Chamber/Glass/Frame)	Packaging	Cat.No.
1-Well	9.40	2.50-5.50	Transparent	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230101
2-Well	4.55	1.20-2.50	Transparent	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230102
4-Well	2.13	0.50-1.30	Transparent	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230104
8-Well	0.98	0.20-0.60	Transparent	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230108
1-Well	9.40	2.50-5.50	White	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230121
2-Well	4.55	1.20-2.50	White	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230122
4-Well	2.13	0.50-1.30	White	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230124
8-Well	0.98	0.20-0.60	White	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230128
1-Well	9.40	2.50-5.50	Black	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230111
2-Well	4.55	1.20-2.50	Black	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230112
4-Well	2.13	0.50-1.30	Black	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230114
8-Well	0.98	0.20-0.60	Black	PS/Glass/PP	6pcs/pk, 12 pcs/cs	230118

Cell Culture Dish

NEST cell culture dishes are ideal for all types of culturing where microscopic examination is required. Numeric indicators on the bottom of each plate allow users to identify the location of cells.

Features

- Manufactured from high-transparency polystyrene
- Flat and clear bottom, free from optical distortion under microscope
- Lid with stacking ring for easy stacking
- Ventilation grid design on lid to ensure gas exchange
- Vacuum plasma-treated culture surface (TC-treated) for excellent cell attachment
- Electron beam sterilized, SAL = 10^{-6} , sterile packaging
- Pyrogen-free, endotoxin-free



Cell Culture Dish

Specification (mm)	Height (mm)	Cell Growth Area (cm ²)	Recommended Medium Volume (mL)	Types	Packing		Cat.No.
					/Pack	/Case	
35	12	8.5	1.8-2.7	Regular	20	25	706001
				Easy Grip	20	25	706201
60	15	22.9	4.2-6.3	Regular	20	25	705001
				Easy Grip	20	25	705201
100	20	57.6	11-16.5	Regular	5	60	704004
					10	30	704002
					20	15	704001
		59.3		Easy Grip	10	30	704202
					20	15	704201
150	25	150.1	30.4-45.6	Regular	5	20	715001

Actual diameter is smaller than the indicated

35 mm dish bottom inner diameter: 35.0 mm

60 mm dish bottom inner diameter: 54.0 mm

100 mm dish bottom inner diameter: 85.6 mm

150 mm dish bottom inner diameter: 138.2 mm

100 mm easy grip dish bottom inner diameter: 86.9 mm

Cell Culture Flask

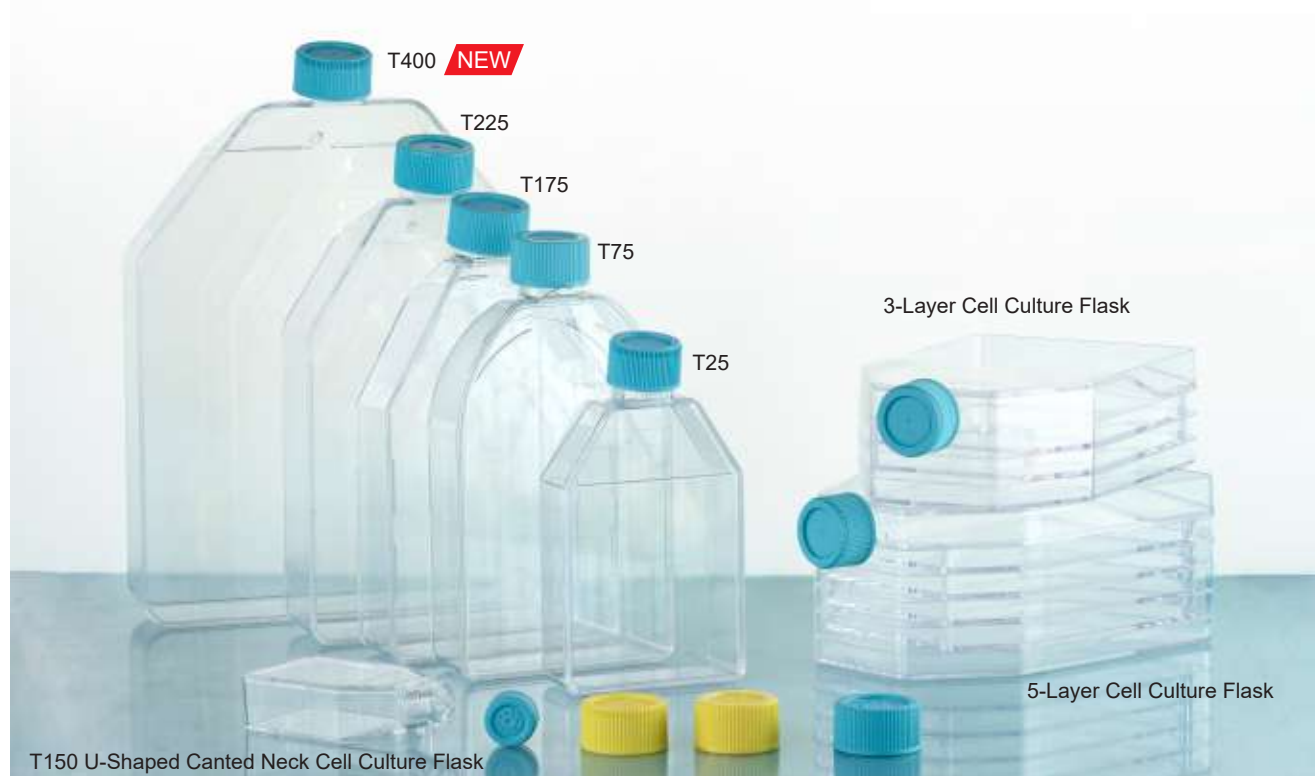
NEST's Cell Culture Flasks whose cell growth areas ranging from 25cm² to 225cm² are available. These flasks are available as tissue culture treated or non-treated as well as with a vent cap or plug seal cap to meet your requirements.

Features

- Made of high clarity, 100% virgin polystyrene.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Frosted writing and clear graduations.
- Notched bottom for slip-free stacking.
- Clear lot number for batch traceability.
- Packaged in sterile, zip-sealable bags.

3 / 5 - Layer Cell Culture Flask

- Made of high clarity, 100% virgin polystyrene.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- 3-Layer Cell Culture Flask Growth area: 520 cm².
- 5-Layer Cell Culture Flask Growth area: 870 cm².
- Individually packaged in sterile bag.



Cell Growth Area (cm ²)	Maximum Graduated Volume (mL)	Recommended Medium Volume (mL)	Size(mm)			Packing		TC Treated		Non-Treated	
			Base Height	Width	Length	/Pack	/Case	Plug seal caps	Vent caps	Plug seal caps	Vent caps
25	30	5-7.5	25.9	53.8	97.13	10	20	707001	707003	707011	707013
75	225	15-22.5	35.7	89.56	160.01	5	20	708001	708003	708011	708013
150	375	30-45	40.3	110.75	203	5	8	720001	720003	720011	720013
175	400	35-52.5	39.1	120.51	217.9	5	8	709001	709003	709011	709013
225	700	45-67.5	46.05	137	238.5	5	5	721001	721003	721011	721013
NEW 400	1200	80-120	56.4	203.3	280.5	2	10	727001	727003	727011	727013
520 (3-layer)	50	60-100	60.1	120.5	203	1	12	731301	731302	/	/
870 (5-Layer)	50	100-150	84.3	120.5	203.6	1	8	731001	731002	/	/



Precautions:

It is important to handle multi-layer Cell Culture Flasks with caution to avoid the formation of bubbles. The presence of bubbles can lead to the creation of siphon bridge at the baffle, resulting in the upper layer of culture medium flowing down to the bottom.

Cell Strainer

Product Application

The NEST cell strainer series can separate primary cells from tissues, continuously obtaining single-cell suspensions with consistent shape and performance.

Application Directions:

- Filtration of sample impurities;
- Preparation of single-cell suspension samples for flow cytometry analysis, including:
 - a) Blood cells from bone marrow, pancreas, thymus, tonsils, and lymph nodes;
 - b) Stem cells, cells from enzyme-digested mammalian tissues or organoids, and cancer cells;
- Cleaning of cell suspensions before cell passaging, counting, analysis, or cryopreservation;
- Preparation of primary cell cultures and immunogen samples;
- Sample preparation before cryopreservation;
- Removal of sticky proteins generated during serum inactivation;
- Compatible with flow cytometers.

Product Features

- Frame made of polypropylene (PP) and mesh made of nylon, both compliant with USP Class VI standards;
- The polypropylene frame can be color-coded for easy operation and differentiation;
- The mesh surface is flat, with evenly distributed pore sizes to ensure consistency and reliability of results;
- Available in three pore sizes: 40 μ m, 70 μ m, and 100 μ m, matched with different colors (blue, white, yellow) for easy identification;
- Unique handle design for convenient handling and reduced risk of contamination;
- Non-stackable cell strainers with large mesh area and high filtration rate, compatible with most 50ml centrifuge tubes on the market;
- Sterile individual packaging, free from RNase, DNase, endotoxins, and cytotoxicity.

Stackable Cell Strainer Ordering Information

Three specifications can be stacked simultaneously for step-by-step filtration, improving filtration efficiency. These are compatible with NEST and most 50mL centrifuge tubes available on the market.



Spec (μ m)	Description	/Pack	/Case	Cat.No.
100	Stackable, 150 mesh, sterile	1	50	258364
70	Stackable, 220 mesh, sterile	1	50	258365
40	Stackable, 360 mesh, sterile	1	50	258366

Non-Stackable Cell Strainer Ordering Information

With a large mesh area and high filtration rate.

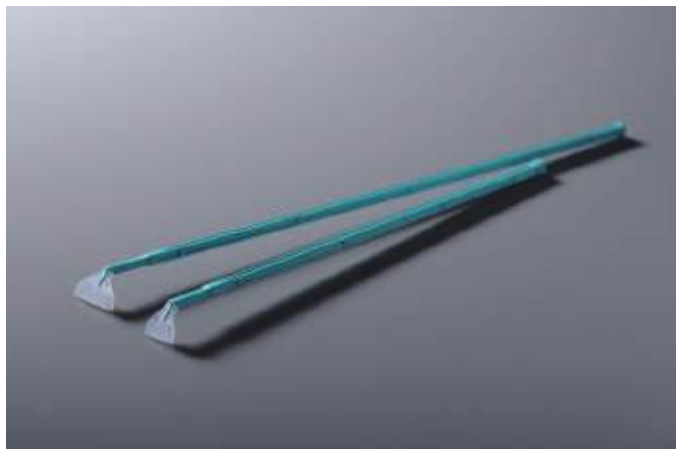


Spec (μ m)	Description	/Pack	/Case	Cat.No.
100	150 mesh, sterile	1	50	258367
70	220 mesh, sterile	1	50	258368
40	360 mesh, sterile	1	50	258369

Cell Scraper

Features

- Blade made of HIPS, handle made of PP
- Free rotating blade, makes the blade twist to the right direction.
- Two sizes are available.
- Easy-tear sterile packing.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Individually packaged.



Spec(mm)		Colour	Sterile	/Case	Cat.No.
Total Length	Blade Width				
220	13	Blue handle + transparent blade	Yes	100	710001
280	20	Blue handle + transparent blade	Yes	100	710011

50mL Mini Bioreactor

Features

- USP VI Polypropylene.
- High transparency, easy to observe.
- Vent caps with 0.22 µm hydrophobic filters for gas exchange without contamination.
- Packaged in sterile, zip-sealable bags.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Suitable for used for centrifugation.



Volume (mL)	/Pack	/Case	Cat.No.
50 mL Vent caps Sterile	10	10	788211



Bioprocessing Solutions

Aseptic Connector



Product Advantages

- **Genderless design:** Universal compatibility, easy integration into single-use systems
- **Easy operation:** Simple three-step connection, intuitive and foolproof
- **Audible feedback:** 'Click' sound confirms secure assembly
- **Multiple sizes available:** Mini and standard versions covering 1/8" to 3/4"

Product Parameters

Material	Main body: PC Sealing ring: Medical-grade silicone Compliance: Both materials comply with ISO 10993 standards
Sterilization	Electron beam irradiation (50–55 kGy) or steam sterilization (121°C, 30 min)
Operating Pressure	No leakage at room temperature under 410 kPa for 30 minutes



Product	Dia.	A(mm)	B(mm)	C(mm)	D(mm)	Plug /Pack	Packaging (Double Bagged)		Cat.No.
Standard	1/4"(6.4 mm)	45.37	36.2	16.3	8.1	/	1	10	747521
	3/8"(9.5 mm)	45.37	37.8	17.75	10.94	/	1	10	747531
	1/2"(12.7 mm)	45.37	41.45	22.25	14.2	/	1	10	747541
	3/4"(19 mm)	45.37	51.8	33.1	20.5	/	1	10	747551
Mini-type	1/8"(3.2 mm)	40.73	29.25	11.04	4.55	/	1	10	747611
	1/4"(6.4 mm)	40.73	33.44	15.23	8.1	/	1	10	747621
	3/8"(9.5 mm)	40.73	33.8	15.6	10.90	/	1	10	747631
Standard (Enhanced Plug)	1/4"(6.4 mm)	45.37	36.2	16.3	8.1	2	1	10	747524
	3/8"(9.5 mm)	45.37	37.8	17.75	10.94	2	1	10	747534
	1/2"(12.7 mm)	45.37	41.45	22.25	14.2	2	1	10	747544
	3/4"(19 mm)	45.37	51.8	33.1	20.5	2	1	10	747554
Mini-type (Enhanced Plug)	1/8"(3.2 mm)	40.73	29.25	11.04	4.55	2	1	10	747614
	1/4"(6.4 mm)	40.73	33.44	15.23	8.1	2	1	10	747624
	3/8"(9.5 mm)	40.73	33.8	15.6	10.90	2	1	10	747634



Quick Connector Collection

Product Advantages

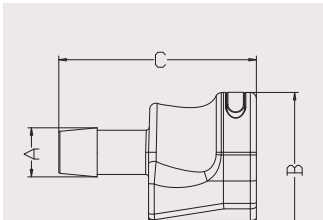
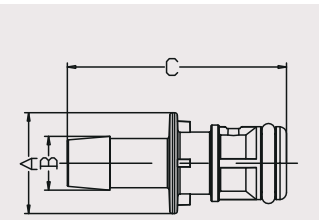
- **High Compatibility:** Easily adapts to other similar quick connectors on the market
- **Easy Operation:** Ergonomic large-button design for effortless handling
- **Quick Connection:** Simple plug-in and pull-out for fast linking and disconnection
- **Multiple Sizes:** Available in high-flow and standard versions, covering 1/8" to 1/2" diameters

Product Parameters

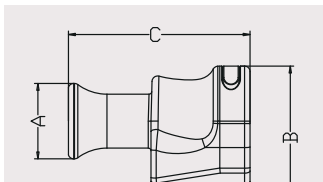
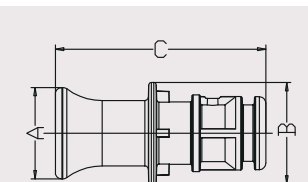
Material	Main body: PC Sealing ring: Medical-grade silicone Compliance: Both materials comply with ISO 10993 standards
Sterilization	Electron beam irradiation (50–55 kGy) or steam sterilization (121°C, 30 min)
Operating Pressure	No leakage at room temperature under 410 kPa for 30 minutes



Female Quick Connector / Male Quick Connector

							
Female Quick Connector				Standard Type			
Product Name		Connection Size (mm)	A(mm)	B(mm)	C(mm)	Pcs/bag (Double-bagged)	Cat.No.
Female Quick Connector	Standard Type	1/8"(3.2 mm)	4.7	26	28.9	25	747311
		1/4"(6.4 mm)	8.1	26	33	25	747321
		3/8"(9.5 mm)	11.15	26	33	25	747331
	High-flow Type	1/2"(12.7mm)	15.4	39.7	48.6	25	747351
Standard Type	Standard Type	1/8"(3.2 mm)	15.2	4.7	28.6	25	747211
		1/4"(6.4 mm)	15.2	8.1	33	25	747221
		3/8"(9.5 mm)	15.2	11.15	33	25	747231
	High-flow Type	1/2"(12.7mm)	22	11.15	48.3	25	747251
		3/8"(9.5mm)	22	15.4	48.3	25	747261

Sealing Cap / Sealing Plug

							
Sealing Cap				Standard Type			
Product Name		A(mm)	B(mm)	C(mm)	Pcs/bag (Double-bagged)	Cat.No.	
Sealing Cap	Standard Type	13.7	26	33	25	747411	
	High-flow Type	19.3	39.7	42.3	25	747461	
Standard Type	Standard Type	13.7	15.2	31.6	25	747421	
	High-flow Type	19.3	22	42	25	747451	

Bioprocessing Closed System Solution



NEST closed system products can effectively reduce the risk of accidental contamination during drug development and production processes. The closed system is ready to use, reducing customer's time for tubing design, assembly, and sterilization, thus improving production efficiency.

We offer a wide range of containers and related transfer caps. Additionally, we can design and develop solutions according to your needs, offering more flexible and variable customization options.

Features

- Closed transfer reduces the risk of contamination during liquid transfer.
- Premium materials that meet UPS VI standards.
- In-house sterilization center, batch testing reaches an SAL 10⁻⁶ level.
- Batch testing shows no cytotoxicity/endotoxins, in compliance with USP 85/ USP 88 (in vivo)/ USP 87 (in vitro) standards.
- Batch testing shows no DNase/RNase or DNA.
- Batch testing shows no BSE/TSE.
- Certified free of animal-derived components.
- Manufactured in facilities compliant with ISO 13485:2016 and ISO 9001 standards, molded and packaged in ISO Class 7 clean rooms.

Generate custom graphics by submitting your request on www.cell-nest.com



NEST Bioprocessing Closed System Solution:

Step 1 Choose the body

(Multiple selections possible)

☒ Cell Culture Flask <u>4</u> pcs	☐ Centrifuge Tube ____ pcs
☐ Carboy ____ pcs	☐ BioFactory ____ pcs
☐ Square Bottle ____ pcs	☐ Erlenmeyer Flask ____ pcs
☐ Erlenmeyer Flask, High Efficiency ____ pcs	

Step 2 Choose the Accessories

(Multiple selections possible)

☐ Erlenmeyer Flasks Accessories _____
☒ BioFactory Accessories <u>Wide Mouth Seal Cap 8 pcs</u>
☐ Square Bottles Accessories _____
☐ Centrifuge Tube Accessories _____
☐ Carboy Accessories _____
☒ Accessories <u>Female Quick Connector 5 pcs</u>



Additionally, NEST also provides fully validated accessories such as connectors, filters, tubing, clamps, etc., making it easy to meet your specific application design requirements.

Once you have determined the type of container and connection method you need, you can contact a NEST product manager or sales representative for a more detailed design proposal.

Bioprocessing Closed System

Erlenmeyer Flask Closed System Solution

- Closed system reduces the risks of contamination during liquid transfer.
- One-piece construction of caps and connectors reduces the risk of leakage and media residue.
- Caps of various diameters are available and aseptic welding of liquid inlet tubing under normal conditions is supported.
- High-quality materials and smooth inner wall of the tubing provide an excellent transfer performance.
- Sterilized by E-beam, SAL=10⁻⁶.
- Endotoxin-free, and no ingredients of animal origin.
- Individually packaged in sterile bag.

Can only transfer liquid;
Use a breathable vent lid
for incubation.

Use peristaltic pump



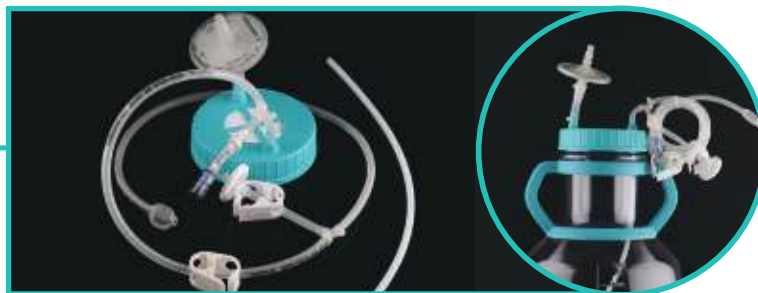
- For aseptic transfer of culture medium and cell culture solution.
- One end of the pipeline is connected to the MPC series connector, which increases the convenience and safety in use. The male connector and the sealing cap are tightly connected to prevent accidental disconnection, and the connector can be rotated to reduce pipeline distortion.

Use gravity to decrease
damage to cells



- No need for other equipment, and no damage to cells.
- Invert the bottle to transfer the liquid by gravity.
- Available with regular tubing or wide-mouth tubing.

When liquid transfer,
sampling, and culture
functions are required
in one unit, a
multifunctional transfer
cap could be used.



Compatible with 2/3/5L high efficient Erlenmeyer flasks. Different from bi-directional liquid transfer cap, the multifunctional transfer cap can be directly placed in an incubator for culture after the liquid transfer is completed. It can reach a large air flux. The quick sampling connector is composed of a sampling nozzle and a one-way valve, which can prevent the liquid from flowing backwards during the sampling process and ensure the aseptic sampling. The liquid inlet tubing is provided with a PTFE needle filter, which solves the issue of liquid remaining in the tubing during the feeding process.

BioFactory Closed System Solution



- Closed liquid transfer, avoiding open operation and reducing the risk of pollution in the process of liquid transfer.
- The liquid inlet tube can be aseptically welded under a normal environment.
- High-quality materials and smooth inner wall of the tube, ensuring an excellent transmission performance.
- Electron beam sterilization, SAL = 10^{-6} .
- No endotoxin and no components of animal origin.

Centrifuge Tube Closed System Solution



- The pre-assembled Closed System is ready to use at hand. The closed liquid transfer avoids the contamination risk of open transfer and eliminates the necessity of subsequent cleaning validation.
- The pipeline material meets the requirements of industrial pharmaceutical enterprises, and is connected to male taper at the connector, which prevents accidental disconnection and offers convenience.
- The double aseptic packaging suits GMP production.
- Pipelines can be customized according to demand.

Cell Culture Flask Closed System Solution



- Allows for cell culture and liquid transfer without the need to open the cap and hence minimizes the risk of contamination during liquid transfer.
- Intended for both aerobic cells (by opening the clamp) and anaerobic cells (by closing the clamp).
- Liquid transfer can be achieved by gravity without the need for peristaltic pumps.
- The one-piece injection moulding for bottle and cap reduces the risk of leakage and media residue.
- The TPE tube can be sealed in non-sterile environments.
- The high-quality materials makes smooth inner wall of the tube and ensures excellent transfer performance.
- Sterility assurance level (SAL) = 10^{-6} .
- Free from endotoxins and animal-derived components.

Square Bottle Closed System Solution



Square Storage Bottle is a reagent storage container commonly utilized in laboratories. NEST offers Square Storage Bottles in PET, PETG, and PC materials. Additionally, a fresh range of PET bottles featuring a classic square shoulder design is recently launched, offering a wider variety of specifications and liquid storage solutions.

The bottle body has high transparency, high mechanical strength, and strong impact resistance, making it convenient for observation and transportation.

- The material has strong tolerance, low temperature resistance, UV resistance, and is not easy to crack.
- The smooth inner surface minimizes the residue on the inner wall.
- Non-cytotoxic, non-pyrogenic, and free of animal-derived components.

Erlenmeyer Flasks Accessories

Name	Description	Packing/Tube Material	Cat.No.
Erlenmeyer Flasks Cap   	Seal Cap for 125 mL PC / PETG Erlenmeyer Flasks	1 per bag, 25 bags/box	781925
	Vent Cap for 125 mL PC / PETG Erlenmeyer Flasks	1 per bag, 25 bags/box	781935
	Seal Cap for 250 mL PC / PETG Erlenmeyer Flasks	1 per bag, 25 bags/box	782925
	Vent Cap for 250 mL PC / PETG Erlenmeyer Flasks	1 per bag, 25 bags/box	782935
	Seal Cap for 500&1000 mL PC / PETG Erlenmeyer Flasks	1 per bag, 25 bags/box	783925
	Vent Cap for 500&1000 mL PC / PETG Erlenmeyer Flasks	1 per bag, 25 bags/box	783935
	Seal Cap for 2L Erlenmeyer Flasks	1 per bag, 20 bags/box	785903
	Vent Cap for 2L Erlenmeyer Flasks	1 per bag, 20 bags/box	785913
	Seal Cap for 3L / 2&3L High Efficient Erlenmeyer Flasks	1 per bag, 20 bags/box	786903
	Vent Cap for 3L / 2&3L High Efficient Erlenmeyer Flasks	1 per bag, 20 bags/box	786913
	Seal Cap for 3L Wide-mouth/5L Erlenmeyer Flasks	1 per bag, 20 bags/box	787903
	Vent Cap for 3L Wide-mouth/5L Erlenmeyer Flasks	1 per bag, 20 bags/box	787913
Erlenmeyer Flasks Liquid Transfer Cap    	125mL Erlenmeyer Flasks Bidirectional Liquid Transfer, NEST Colour, Dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/4" air filter connector	Available as optional accessory only
	250mL Erlenmeyer Flasks Bidirectional Liquid Transfer, NEST Colour, Dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/4" air filter connector	
	500mL / 1L Erlenmeyer Flasks Bidirectional Liquid Transfer, NEST Colour, Dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/4" air filter connector	
	2L Erlenmeyer Flasks Bidirectional Liquid Transfer, NEST Colour, Dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/4" air filter connector	
	2/3L High Efficient / 3L Erlenmeyer Flasks Bidirectional Liquid Transfer, White, Dual-port cap	Double connector, can connect 1/8" ID and 1/4" ID hoses separately	
	2/3L High Efficient / 3L Erlenmeyer Flasks Bidirectional Liquid Transfer, White, Dual-port cap	Double connector, can connect 1/4" ID hoses on both ends	
	3L Wide mouth / 5L High Efficient Erlenmeyer Flasks Bidirectional Liquid Transfer, White, Dual-port cap	Double connector, can connect 1/8" ID and 1/4" ID hoses separately	
	3L Wide mouth / 5L High Efficient Erlenmeyer Flasks Bidirectional Liquid Transfer, White, Dual-port cap	Double connector, can connect 1/4" ID hoses on both ends	
	2/3L High Efficient/3L Erlenmeyer Flasks Bidirectional Liquid Transfer, Green, Dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/4" air filter connector, Can invert for solution transfer	
	2/3L High Efficient/3L Erlenmeyer Flasks Bidirectional Liquid Transfer, Green, Dual-port cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector, Can invert for solution transfer	
	3L Wide mouth / 5L High Efficient Erlenmeyer Flasks Bidirectional Liquid Transfer, Green, Dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/4" air filter connector, Can invert for solution transfer	
	3L Wide mouth / 5L High Efficient Erlenmeyer Flasks Bidirectional Liquid Transfer, Green, Dual-port cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector, Can invert for solution transfer	
	2/3L High Efficient / 3L Erlenmeyer Flasks Bidirectional Liquid Transfer, Breathable membrane, NEST Colour, Dual-port cap	Double connector, can connect 1/8" ID and 1/4" ID hoses, with 0.22µm breathable membrane, can be used directly for cultivation	
	3L Wide mouth / 5L High Efficient Erlenmeyer Flasks Bidirectional Liquid Transfer, Breathable membrane, NEST Colour, Dual-port cap	Double connector, can connect 1/8" ID and 1/4" ID hoses, with 0.22µm breathable membrane, can be used directly for cultivation	
	3L Wide mouth / 5L High Efficient Erlenmeyer Flasks Bidirectional Liquid Transfer, Large-area breathable membrane, NEST Colour, Dual-port cap	Double connector, can connect 1/8" ID hoses on both ends, with 0.22µm large-area breathable membrane, suitable for high air-flux cultivation	

BioFactory Accessories

Name	Description	Packing/Tube Material	Cat.No.
  	Wide Mouth Seal cap for BioFactory, sterilized	1 per bag, 10 bags/box	740001
	Wide Mouth Vent cap for BioFactory, sterilized	1 per bag, 10 bags/box	740011
	Narrow Mouth Seal cap for BioFactory, sterilized	1 per bag, 10 bags/box	740101
	Narrow Mouth Vent cap for BioFactory, sterilized	1 per bag, 10 bags/box	740111
	Adaptor Cap, sterilized	Can connect 3/8" ID hose, 1 per bag, 10 bags/box	740302
	Adaptor Cap, sterilized	Can connect 1/4" ID hose, 1 per bag, 10 bags/box	740402
	Wide Mouth to Narrow Mouth, sterilized	Wide to narrow mouth, compatible with narrow mouth connectors, sealing caps, breathable caps, 1 per bag, 10 bags/box	740201
	Cap with Filter Adapter Cap, sterilized	Wide to narrow mouth, compatible with narrow mouth connectors, sealing caps, breathable caps, 1 per bag, 10 bags/box	740213
	Solid Over Cap, sterilized	1 per bag, 20 bags/box	740901
	Filter Adapter Cap, sterilized	1 per bag, 20 bags/box	740913
	Small-bore tube connector, sterilized	Can be directly inserted into the narrow mouth of the cell factory, compatible with 3/8" ID hose, 10 per box	741001
	BioFactory Holder	1 per bag, 1 bags/box	751101

Square Storage Bottle Accessories

Name	Description	Packing/Tube Material	Cat.No.
Square Storage Bottle Accessories 	2L Square storage bottle bi-directional transfer cap, white, dual-port cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector	Available as optional accessory only
	2L Square storage bottle bi-directional transfer cap, three-way cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector	
	5L / 10L / 20L Square storage bottle bi-directional transfer cap, white, dual-port cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector	
	5L / 10L / 20L Square storage bottle three-way transfer cap, white, three-way cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector	
	125-1000mL Square storage bottle transfer cap, white, dual-port cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector	
	125-1000mL Square storage bottle transfer cap, white, dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/8" air filter connector	
	125-1000mL Square storage bottle three-way transfer cap, white, three-way cap	1/8" ID liquid inlet and outlet hose connector, 1/8" air filter connector	

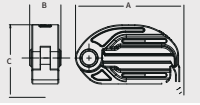
Centrifuge Tube transfer cap / Cell culture bottle Accessories Carboy Accessories

Name	Description	Packing/Tube Material	Cat.No.
	50mL Centrifuge tube conversion cap, NEST color, dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/8" air filter connector	Available as optional accessory only
	250mL High-capacity centrifuge tube conversion cap, NEST color, dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/8" air filter connector	
	500mL High-capacity centrifuge tube conversion cap, NEST color, dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/8" air filter connector	
	25cm ² cell culture bottle inverted transfer cap, NEST color, dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/8" air filter connector	
	75cm ² cell culture bottle inverted transfer cap, NEST color, dual-port cap	1/8" ID liquid inlet and outlet hose connector, 1/8" air filter connector	
Cell culture bottle Accessories	175cm ² cell culture bottle inverted transfer cap, NEST color, dual-port cap	1/4" ID liquid inlet and outlet hose connector, 1/8" air filter connector	only
	83B three-way cap	1/2" ID liquid inlet and outlet hose connector, 3/8" air filter connector	789911
Carboy Accessories	83B three-way cap	1/4" ID liquid inlet and outlet hose connector, 1/4" air filter connector	789901

Generic Accessories

Name	Description	Packing/Tube Material	Cat.No.
Air filter 	Air filter, 20cm ² membrane area, 0.22µm pore size		Available as optional accessory only
	Air filter, 13.8cm ² membrane area, 0.22µm pore size		
	Air filter, 4.5cm ² membrane area, 0.22µm pore size		
Hose 	Platinum-cured silicone tubing	3/16"ID 3/8"OD	
	Platinum-cured silicone tubing	1/4"ID 3/8"OD	744221
	Platinum-cured silicone tubing	3/8"ID 5/8"OD	744201
	Platinum-cured silicone tubing	1/8"ID 1/4"OD	744211
	Platinum-cured silicone tubing	1/4"ID 7/16"OD	744231
	C-Flex Weldable Tubing	1/8"ID 1/4"OD	Available as optional accessory only
	C-Flex Weldable Tubing	1/4"ID 7/16"OD	
	C-Flex Weldable Tubing	1/4"ID 1/4"OD	
	C-Flex Weldable Tubing	3/8"ID 5/8"OD	
	TPE Hose	1/8"ID 1/4"OD	744311
	TPE Hose	1/4"ID 7/16"OD	744331
	TPE Hose	1/4"ID 3/8"OD	744321
	TPE Hose	3/8"ID 5/8"OD	744301
	PTFE Hose	1.59mmID 3.1mmOD	Available as optional accessory only
	PTFE Hose	4mmID 6mmOD	
	Silicone Tubing	1/8"ID 1/4"OD	
	Silicone Tubing	1/4"ID 3/8"OD	
	Silicone Tubing	3/16"ID 5/16"OD	
	PVC Hose	1/8"ID 3/16"OD	
	PVC Hose	3mmID 4mmOD	
	Tube clamp, POM material	Compatible with 12–18 mm OD tubing	only
Accessories 	Tubing Clamp, Polypropylene material	Compatible with 1/8" ID hose	
	Sampling head	Compatible with 1/8" ID hose	
	Check Valve	Compatible with 1/8" ID hose	

Closed System Solutions

Features	Name	Connector Size	pcs/bag (double-layer packaging)	Cat.No.
• Supports electron beam sterilization (up to 50–55 kGy) • Smooth edges prevent damage to tubing • Withstands pressures of biopharmaceutical-grade flow shut-off • Usable at –80 °C, suitable for extreme-condition applications • Ready to use, side-loading design enables safe one-handed operation	Tube Clamp  	Tubing with a wall thickness of 3/32" (2.4 mm)	25	743221
• Raw materials comply with USP Class VI standards • Each batch is rigorously tested to ensure secure clamping on the specified tubing without slippage • Compatible with electron beam sterilization (50–55 kGy) or autoclave sterilization (121 °C, 30 min)	Quad Coil Clamp  	Tubing with 1/4" (6.4 mm) outer diameter	100	750811

Luer Connector Collection

Product Parameters	Name		Compatible Tubing Sizes	pcs/bag (double-layer)	Cat.No.
Material PP Compliant with USP Class VI standards Sterilization Electron beam irradiation (50–55 kGy) or steam sterilization (121°C, 30 min) Operating Pressure No leakage at room temperature under 410 kPa for 30 minutes	 Luer Male Connector	Luer Male Connector	Compatible with 1/4" (6.4 mm) inner diameter tubing	100	746611
			Compatible with 1/16" (1.6mm) inner diameter tubing	100	746621
			Compatible with 3/32" (1.9mm) inner diameter tubing	100	746631
			Compatible with 1/8" (3.2mm) inner diameter tubing	100	746641
			Compatible with 5/32" (4.0mm) inner diameter tubing	100	746651
			Compatible with 3/16" (4.8mm) inner diameter tubing	100	746261
	 Luer Female Connector	Luer Female Connector	Compatible with 1/4" (6.4 mm) inner diameter tubing	100	746711
			Compatible with 1/16" (1.6mm) inner diameter tubing	100	746721
			Compatible with 3/32" (1.9mm) inner diameter tubing	100	746731
			Compatible with 1/8" (3.2mm) inner diameter tubing	100	746741
			Compatible with 5/32" (4.0mm) inner diameter tubing	100	746751
			Compatible with 3/16" (4.8mm) inner diameter tubing	100	746361
	 Luer Cap	Luer Cap	Luer Male Connector	25	746411
		Luer Plug	Luer Female Connector	25	746421

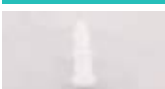
TC Flange Connector Collection

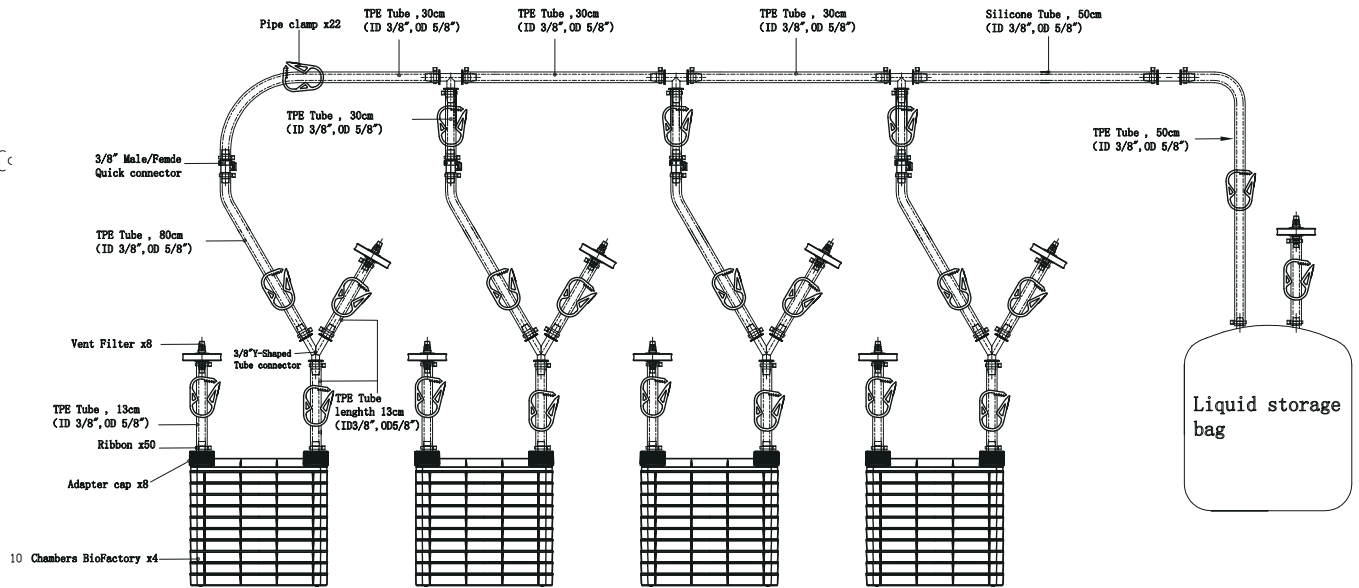
Product Parameters	Name		Compatible Tubing Sizes	pcs/bag (double-layer packaging))	Cat.No.
Accessories included Flange connector, gasket, closure clamp, end cap Material Flange connector: PP Gasket: medical-grade silicone Closure clamp: glass fiber-reinforced nylon All materials comply with ISO 10993 standards Sterilization Electron beam irradiation (50–55 kGy) or steam sterilization (121°C, 30 min) Operating Pressure No leakage at room temperature under 410 kPa for 30 minutes		3/4" Flange Connector	1/4"(6.4 mm)	100	751211
		3/2" Flange Connector	1/4"(6.4 mm)	100	751411
		3/4" Flange Connector	1/8"(3.2 mm)	/	Coming soon
	3/4" Flange Connector	3/8"(9.5 mm)	/		
	3/4" Flange Connector	1/2"(12.7 mm)	/		
	3/2" Flange Connector	3/8" (9.5 mm)	/		
		3/2" Flange Connector	1/2" (12.7 mm)	/	
		3/2" Flange Connector	3/4"(19 mm)	/	
		3/2" Flange Connector	1"(25.4 mm)	/	
		End Cap	/	100	750211
			/	100	750231
		Gasket	3/4"	25pcs/bag,4bags/pack	751291
			3/2"	25pcs/bag,4bags/pack	751491
		Closure Clamp	1/2" to 3/4"	25	750411
			1" to 3/2"	25	750431

Tube-to-Tube Connection

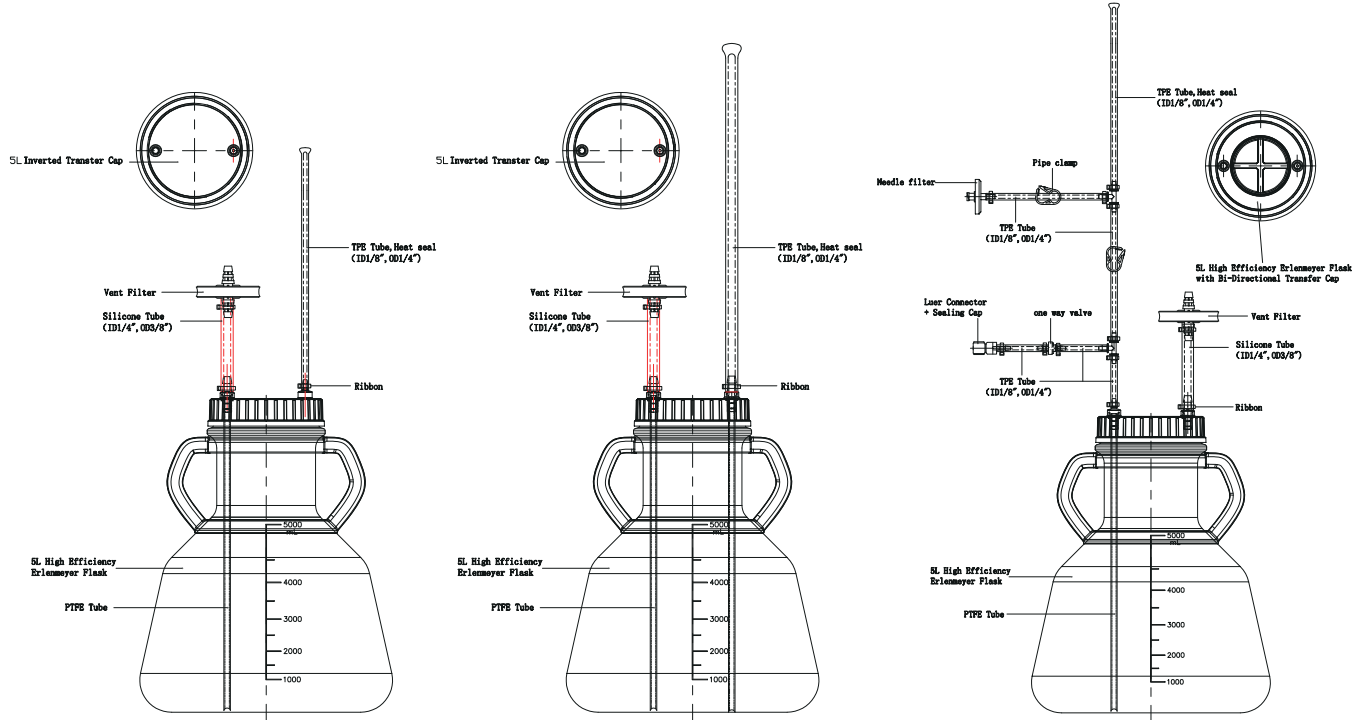
Product Parameters	Name		Compatible Tubing Sizes	pcs/bag (double-layer packaging))	Cat.No.
• Flexible configurations: Straight and multi-size reducing connectors to meet diverse tubing connection needs. • Low hold-up design: Smooth inner surfaces minimize fluid retention. • Efficient operation: Simple structure enables easy installation and replacement. • High-performance compliance: Compliant with USP <87>, USP <88>, and ISO 10993 biocompatibility requirements.	 Straight Connector	Straight Connector	1/4" (6.4mm)	100	749231
			1/8" (3.2mm)	100	749211
			3/16" (4.8mm)	100	749221
			5/16" (7.9mm)	100	749241
			3/8" (9.5mm)	100	749251
			1/2" (12.7mm)	100	749261
			1/16" (1.6mm)	/	Coming soon
			3/32" (1.9mm)	/	
			5/32" (4.0mm)	/	
			5/8" (15.9 mm)	/	
			3/4" (19 mm)	/	
			1" (25.4 mm)	/	
	 Reducer Connector	Reducer Series	1/4"×3/8"(6.4mm×9.5mm)	100	749371
			1/16"×1/8"(1.6mm×3.2mm)	100	749311
			1/16"×3/16"(1.6mm×4.8mm)	100	749811
			1/16"×1/4"(1.6mm×6.4mm)	100	749321
			1/8"×3/16"(3.2mm×4.8mm)	100	749331
			1/8"×1/4"(3.2mm×6.4mm)	100	749341
			3/16"×5/16"(4.8mm×7.9mm)	100	749351
			3/16"×3/8"(4.8mm×9.5mm)	100	749821
			1/4"×1/2"(6.4mm×12.7mm)	100	749381
			3/8"×1/2"(9.5mm×12.7mm)	100	749391
			3/32"×1/16"(1.9mm×1.6mm)	/	Coming soon
			5/32"×1/16"(4.0mm×1.6mm)	/	
			1/8"×3/32"(3.2mm×1.9mm)	/	
			5/32"×3/32"(4.0mm×1.9mm)	/	
			1/8"×5/32"(3.2mm×4.0mm)	/	
			3/16"×3/32"(4.8mm×1.9mm)	/	
			3/16"×5/32"(4.8mm×4.0mm)	/	
			1/4"×3/32"(6.4mm×1.9mm)	/	
			1/4"×5/32"(6.4mm×4.0mm)	/	
			1/4"×3/16"(6.4mm×4.8mm)	/	
			5/16"×5/32"(8.0mm×4.0mm)	/	
			5/16"×1/4"(8.0mm×6.4mm)	/	
			3/8"×1/8"(9.5mm×3.2 mm)	/	
			3/8"×5/32"(9.5mm×4.0mm)	/	
			3/8"×5/16"(9.5mm×8.0mm)	/	
			1/2"×5/16"(12.7mm×8.0mm)	/	
			5/8"×1/4"(15.9mm×6.4mm)	/	
			5/8"×5/16"(15.9mm×8.0mm)	/	
			5/8"×3/8"(15.9mm×9.5mm)	/	
			5/8"×1/2"(15.9mm×12.7mm)	/	
			3/4"×3/8"(19.0mm×9.5mm)	/	
			3/4"×1/2"(19.0mm×12.7mm)	/	
			3/4"×5/8"(19.0mm×15.9mm)	/	
			1"×1/2"(25.4mm×12.7mm)	/	
			1"×5/8"(25.4mm×15.9mm)	/	
			1"×3/4"(25.4mm×19.0mm)	/	

Tube-to-Tube Connection

Product Parameters	Name		Compatible Tubing Sizes	pcs/bag (double-layer packaging))	Cat.No.
• Supports flow splitting and merging: Enables multi-path fluid transfer. • Flexible layout: Facilitates the construction of branches, bypasses, and sampling lines, enhancing system scalability. • Optimized flow paths: Reduces local flow resistance and ensures stable fluid transfer.	 T-Shaped Tube Connector	T-Shaped Tube Connector	1/4"(6.4mm)	25	749631
			1/16"(1.6mm)	/	Coming soon
			3/32"(1.9mm)	/	
			1/8"(3.2 mm)	/	
			5/32"(4.0mm)	/	
			3/16"(4.8mm)	/	
			3/8"(9.5 mm)	/	
			1/2"(12.7 mm)	/	
			5/8"(15.9 mm)	/	
			3/4"(19 mm)	/	
			1"(25.4 mm)	/	
			1/16"(1.6mm)	/	Coming soon
			3/32"(1.9mm)	/	
			1/8"(3.2 mm)	/	
 Y-Shaped Tube Connector	Y-Shaped Tube Connector	Y-Shaped Tube Connector	5/32"(4.0mm)	/	
			3/16"(4.8mm)	/	
			1/4"(6.4 mm)	/	
			3/8"(9.5 mm)	/	
			1/2"(12.7 mm)	/	
			5/8"(15.9 mm)	/	
			3/4"(19 mm)	/	
			1"(25.4 mm)	/	
• Multi-path connection: Enables four-way fluid distribution or collection for complex fluidic systems. • High integration: Reduces the number of intermediate tubing and connectors, simplifying system design. • Flexible layout: Supports multi-directional tubing routing to improve space utilization.	 Cross Connector Series	Cross Connector Series	1/16"(1.6mm)	/	Coming soon
			1/8"(3.2 mm)	/	
			3/16"(4.8mm)	/	
			1/4"(6.4 mm)	/	
			3/8"(9.5 mm)	/	
			1/2"(12.7 mm)	/	
• Reliable sealing: Designed to seal unused ports, preventing fluid leakage and external contamination. • Maintains system integrity: Effectively preserves a closed fluid path and stable system operation. • Easy to use: Quick installation and removal for both temporary and long-term sealing applications. • High compatibility: Fits multiple port sizes to accommodate different fluidic configurations.	 Plug Series  Plug Series	Plug Series	1/16"(1.6mm)	/	Coming soon
			3/32"(1.9mm)	/	
			1/8"(3.2 mm)	/	
			5/32"(4.0mm)	/	
			3/16"(4.8mm)	/	
			1/4"(6.4 mm)	/	
			3/8"(9.5 mm)	/	
			1/2"(12.7 mm)	/	
			5/8"(15.9 mm)	/	
			3/4"(19 mm)	/	
			1"(25.4 mm)	/	



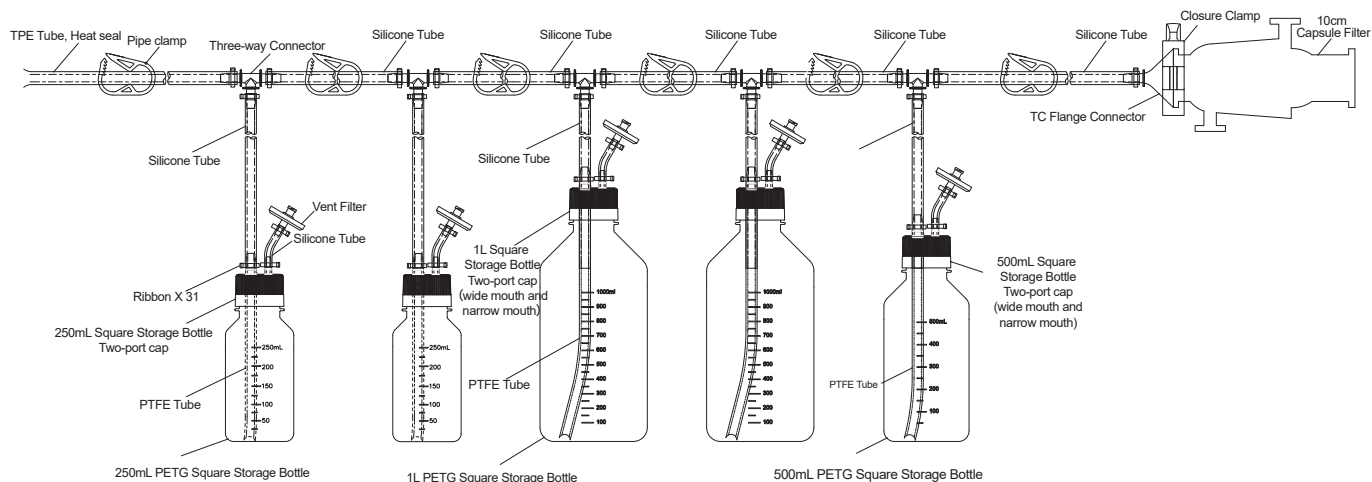
10Layers Biofactory Closed System Solution



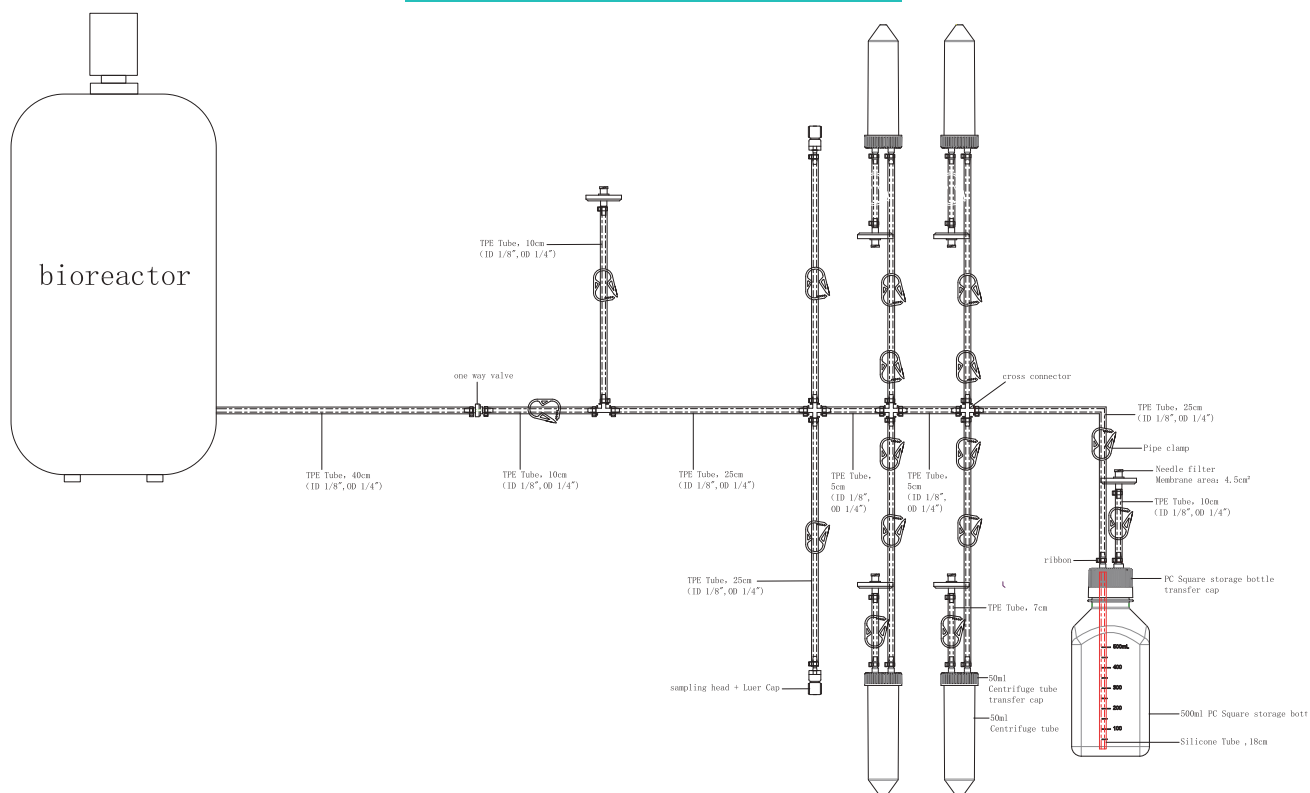
Inverted Liquid Transfer Caps

Bi-directional Liquid Transfer Cap System

Multifunction Liquid Transfer Cap



Square Storage Bottle Closed System Solution



4 Outlet Paralleled Centrifuge Tube Closed System

OptiFlask® Erlenmeyer Flask

NEST Erlenmeyer Flask collection is designed for suspension cell culture, and is ideal for small-scale research and industrial production of vaccines, proteins, monoclonal antibodies and biopharmaceuticals.

NEST provides Erlenmeyer Flasks in sizes ranging from 125 to 3000mL, as well as High Efficiency Erlenmeyer Flasks in sizes of 2-5L. Each size option comes with a choice of a seal or vent cap, as well as the option of a flat bottom or a bottom with baffles. The Erlenmeyer Flasks are available in both PC and PETG.

Accordingly, NEST offers customized transfer caps that are compatible with our Erlenmeyer Flask collection. These caps come in various sizes and can also be tailored to accommodate diverse requirements, allowing for liquid transfer and cultivation in a closed environment.

Strict product quality supervision

Production environment--Class 10,000 clean production workshop

NEST Factory™ is produced in a dedicated 10,000-class clean room, and other products are produced in a 100,000-class clean room.

Production material--Strictly selected polystyrene conforming to USP Class VI standard

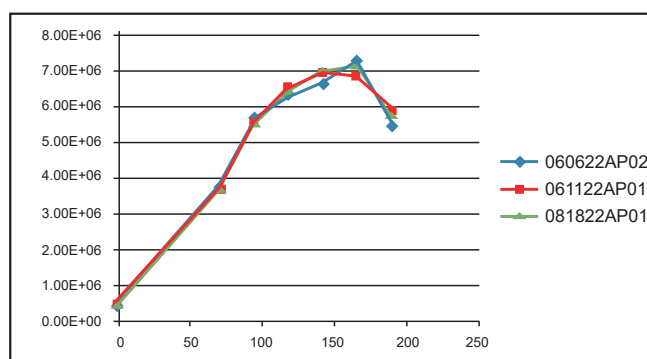
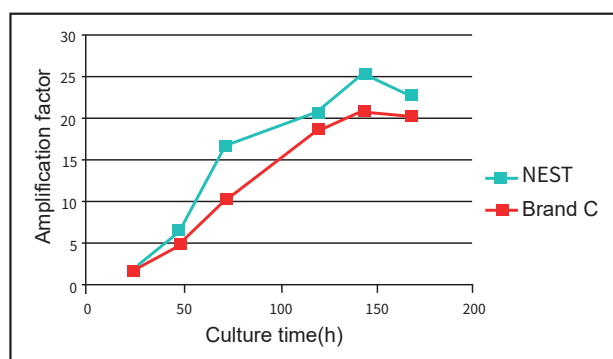
Quality Assurance from Professional Testing Agencies

NEST ensures top product quality, stability, safety, applicability, and effectiveness through the implementation of state-of-the-art production technology and a strict quality control system. All our product ranges have undergone rigorous validation by professional testing institutions possessing national testing qualifications (CMA, CNAS). The internationally recognized testing results provide further assurance.

Performance Testing

Relevant performance testings include sealing test, pressure resistance test, inter-batch stability, endotoxin, nucleic acid enzyme, and cell culture comparative experiments.

Sample batch	Culture time(h)	72	76	120	144	168	192
060622AP02	Cell count	3.82×10^6	5.78×10^6	6.46×10^6	6.79×10^6	7.48×10^6	5.59×10^6
	Amplification factor	12.72	19.25	21.53	22.63	24.94	18.62
061122AP01	Cell count	3.69×10^6	5.67×10^6	6.66×10^6	7.09×10^6	7.05×10^6	5.95×10^6
	Amplification factor	12.30	18.91	22.19	23.62	23.51	19.83
081822AP01	Cell count	3.72×10^6	5.60×10^6	6.58×10^6	7.13×10^6	7.32×10^6	5.88×10^6
	Amplification factor	12.40	18.66	21.93	23.78	24.40	19.59



Biosafety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The product is tested for cytotoxicity, sensitization, intradermal irritation, acute systemic toxicity and hemolysis.

Physical and chemical safety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The products are tested for insoluble particles, ignition residues, metal elements, and dissolved substances (clarity, color, pH, UV absorbance, non-volatile matter, easy oxides, heavy metals).

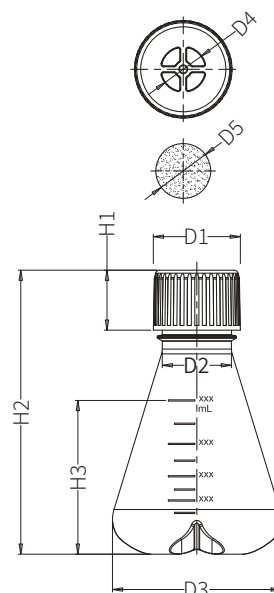
Testing item	Detection limit (mg/L)	Test result (mg/L)
Lead	0.05	N.D.
Tin	0.04	N.D.
Cadmium	0.02	N.D.
Chromium	0.03	N.D.

Testing item	Requirement or detection limit	Testing result
Reducing substances (consumption of $c(1/5KMnO_4)=0.01mol/L$)	$\leq 0.5 mL$	0.12
Acid-base pH (compared with blank solution)	< 1	0.22
Evaporated residue, mg/50mL	$< 2.5 mg$	0.9
UV absorbance 230nm~360nm	< 0.05	0.0070
Appearance	Colorless and transparent	Colorless and transparent
Lead content , $\mu g/mL$	< 0.05	Below the detection limit
Tin content, $\mu g/mL$	< 0.04	Below the detection limit
Cadmium content, $\mu g/mL$	< 0.02	Below the detection limit
Chromium content, $\mu g/mL$	< 0.03	Below the detection limit

Sterility and particle guarantee

NEST ensures thorough testing of its products through examinations of the irradiation process, packaging, and insoluble particles. The verification of the irradiation dose distribution is conducted in accordance with ISO 11137-1:2015, meeting the necessary requirements for sterilization irradiation dose ($SAL=10^{-6}$).

OptiFlask® Erlenmeyer Flask

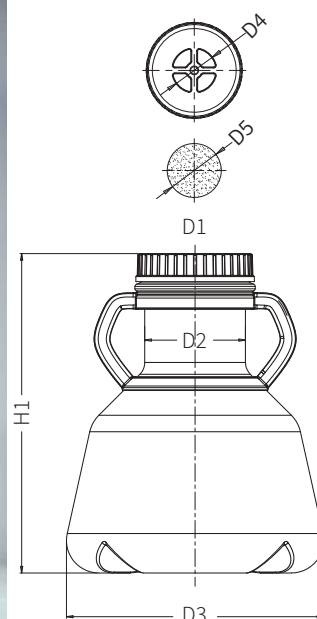


- Erlenmeyer Flask collection is suitable for suspension cell culture or bacterial culture, and can also be used for medium preparation, mixing, and storage.
- The body is made of PETG/PC, and the cap is made of PP. Both materials comply with USP Class VI.
- Qualified by the USP Class 6 Standard, PC bottle with high transparency, is resistant to strong impact, oxidation and high temperature up to 121 °C.
- Vent caps with 0.22 µm hydrophobic filters for gas exchange without contamination.
- The baffled bottom can improve gas exchange efficiency and ensure better oxygen dissolution in the culture medium, but it also increases cell shear force.
- Individually packaged in sterile bags
- There's a scale made by injection molding on the flask body to facilitate observing the filled liquid volume.
- Non-Pyrogenic, DNase/Rnase free.
- Sterilized by E-beam, SAL=10⁻⁶.

Erlenmeyer Flask

Volume (mL)	Bottom Type	D1	D2	D3	D4 Seal Cap	D4 Seal Cap	H1	H2	H3	Packing		PETG		PC	
										/Pack	/Case	Seal Cap	Vent Filter Cap	Seal Cap	Vent Filter Cap
125	Flat-bottom	38.00	29.30	65.80	14.85	22.50	29.50	113.00	57.20	1	24	781001	781011	781101	781111
	Baffled	38.00	29.30	65.80	14.85	22.50	29.50	115.00	59.20	1	24	781301	781311	781201	781211
250	Flat-bottom	42.80	34.00	83.00	21.65	27.00	29.50	139.70	73.10	1	12	782001	782011	782101	782111
	Baffled	42.80	34.00	83.00	21.65	27.00	29.50	139.70	73.10	1	12	782301	782311	782201	782211
500	Flat-bottom	48.00	39.00	101.00	21.65	27.00	29.50	178.00	103.50	1	12	783001	783011	783101	783111
	Baffled	48.00	39.00	101.00	21.65	27.00	29.50	179.00	104.50	1	12	783301	783311	783201	783211
1000	Flat-bottom	48.00	39.00	128.00	21.65	27.00	29.50	204.20	138.90	1	6	784001	784011	784101	784111
	Baffled	48.00	39.00	128.00	21.65	27.00	29.50	207.70	142.40	1	6	784301	784311	784201	784211
2000	Flat-bottom	54.00	50.00	162.00	19.00	27.00	25.00	285.50	152.30	1	6	/	/	785001	785011
	Baffled	54.00	50.00	162.00	19.00	27.00	25.00	285.50	152.30	1	6	/	/	/	/
3000	Flat-bottom	75.50	72.50	230.00	36.00	44.00	25.00	253.50	97.00	1	4	/	/	786001	786011
	Baffled	75.50	72.50	230.00	36.00	44.00	25.00	253.50	97.00	1	4	/	/	786005	786015

OptiFlask® Erlenmeyer Flask, High Efficiency



The high-efficiency shake flask is made of medical-grade PC with an extended neck design to keep hands away from the opening. The 5L flask comes with a handle for easy carrying. Its optimized bottom design reduces space usage, lowers cell shear stress, and effectively controls foam compared with conical flasks of the same capacity. The 2L flask cap has a larger gas-permeable membrane than the 2L conical flask, providing greater oxygen flux. The 3L wide-mouth flask shares the same bottom diameter as the 3L flask but uses the 5L neck size, further enhancing oxygen transfer.

Feature

- Qualified by the USP Class 6 Standard, PC bottle with high transparency, is resistant to strong impact, oxidation and high temperature up to 121 °C.
- Obvious and accurate scale.
- The vent cap is covered with a 0.2 µm vent membrane, watertight but not airtight.
- Equipped with transfer Cap, more safe and convenient operation.
- Individually packaged in sterile bag.
- Non-Pyrogenic, DNase/Rnase free.
- Suitable for suspension cell culture or bacterial culture, as well as for medium preparation, mixing, and storage
- Sterilized by E-beam, SAL=10⁻⁶.

Erlenmeyer Flask, High Efficiency

Volume (L)	Dimension (mm)			Cap Style	/Case	Cat.No.	
	Height	Bottleneck Dia	Bottom Dia			Flat-bottom	With Baffles
2.0	213.5	67	162	Seal Cap	4	785101	785105
	213.5	67	162	Vent Filter Cap	4	785111	785115
3.0	253.5	67	162	Seal Cap	4	786101	786105
	253.5	67	162	Vent Filter Cap	4	786111	786115
3.0 (Wide-mouth)	253.5	90	162	Seal Cap	4	786501	786505
	253.5	90	162	Vent Filter Cap	4	786511	786515
5.0	285.5	90	230	Seal Cap	4	787001	787005
	285.5	90	230	Vent Filter Cap	4	787011	787015

Third-party cell culture testing reports available

BioFactory

Strict product quality supervision

NEST BioFactory is a precisely designed cell culture system that maximizes the available culture area within a limited space, saving substantial floor space and achieving large-scale expansion at low cost.

NEST BioFactory is suitable for industrial-scale production such as vaccines, monoclonal antibodies, or biopharmaceuticals, and is ideal for adherent cell culture. Linear scale-up does not alter the kinetic growth conditions of the cells. Specifications: Single-layer, 2-layer, 5-layer, 10-layer, 15-layer, and 20-layer.

Production environment--Class 10,000 clean production workshop

NEST Factory is produced in a dedicated 10,000-class clean room, and other products are produced in a 100,000-class clean room.

Production material--Strictly selected polystyrene conforming to USP Class VI standard

Production Process--Strictly follow SOP for production and quality control

Exquisite product design, high precision forming, ultrasonic welding, no chemical addition.

Surface treatment--Tissue culture treated

The surface of the cell culture container is treated with hydrophilic treatment to ensure that the cells adhere to the surface more evenly and stable with better adsorption capacity.

Product expiration date verification

The cell growth surface can still meet the cell growth requirements after three years of aging, and there is no positive result of the sterility test.

Biosafety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The product is tested for cytotoxicity, sensitization, intradermal irritation, acute systemic toxicity and hemolysis.

Physical and chemical safety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The products are tested for insoluble particles, ignition residues, metal elements, and dissolved substances (clarity, color, pH, UV absorbance, non-volatile matter, easy oxides, heavy metals).

Process testing

In order to ensure the structure and strength of the product, it is necessary to verify the performance of relevant equipment, such as injection molding machines, molds, plasma equipment, welding machines, leakage meter and so on before production. After production, the product should be verified for sealing, strength, dropping and transportation.

Cell growth test

Cell growth homogeneity experiment.

Cell factory validation test--Sterility and particle guarantee

Product initial bioburden test, irradiation dose setting, dose review, aseptic packaging verification, irradiation process verification, product sterility and particle testing.

Applicable cells

VERO、MRC-5、2BS、293T、L-929

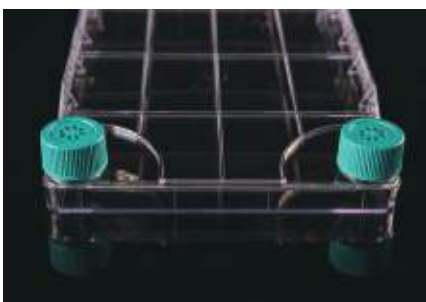
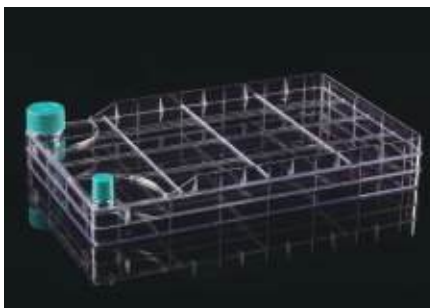
Packaging strength verification

The breakage rate is less than 3% after repeated long distance delivery challenges.

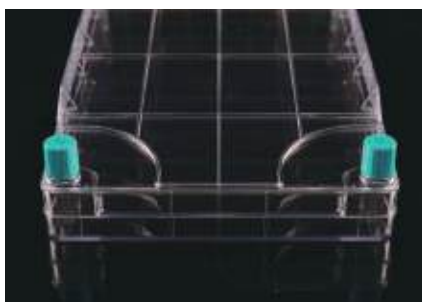
Sterility Guarantee--Imported Rhodotron® TT200 electron accelerator from Belgian IBA company, Self-built irradiation center.

The irradiation sterilization process has passed ISO 13485 and ISO 11137 quality system certification.

- Made of high clarity, 100% virgin polystyrene.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Excellent welding line design can avoid producing particles during welding and make the biofactory stronger (Under Features 7th line).
- Vent caps with 0.22 µm hydrophobic filters for gas exchange without contamination.
- Wide mouth is applicable to pour culture medium directly. Narrow mouth is applicable to operate with the aseptic pipeline.
- Standardize operations to reduce batch differences.
- Individually packaged in double-layer sterile bags.
- TC treated, good for cell attachment and growth.
- Clear lot number for batch traceability.
- Ultrasonic welding without extrinsic ingredients.
- Standardize operations to reduce batch differences.
- Growth kinetics are the same as cells grow in the cell culture flasks. Applicable to large-scale culture adherent cells.
- Large growing area. Just a single operation, you can cultivate a large number of cells and reduce contamination risk.
- Applicable to automatic machine.



2 Wide Plug Seal Caps



2 Narrow Plug Seal Caps



1 Wide + 1 Narrow Plug Seal Cap

BioFactory

Layer	Cultivation Area (cm ²)	Dimension (mm)			/Case	Seal Caps	Vent Filter Caps	Cat.No.		
		Length	Width	Height				2 Wide Plug	2 Narrow Plug	1 Wide + 1 Narrow Plug
1	632	335	205	48	8	16	16	771001	772001	773001
2	1264	335	205	65	8	16	16	771101	772101	773101
4	2528	335	205	95	4	8	8	771704	772704	/
5	3160	335	205	116	4	8	8	771204	772204	773204
6	3792	335	205	129	4	8	8	771604	/	/
10	6320	335	205	201	6	12	12	771302	772302	773302
15	9480	335	205	286	2	4	4	771503	/	/
40	25280	335	205	711	2	4	4	771403	772403	773403

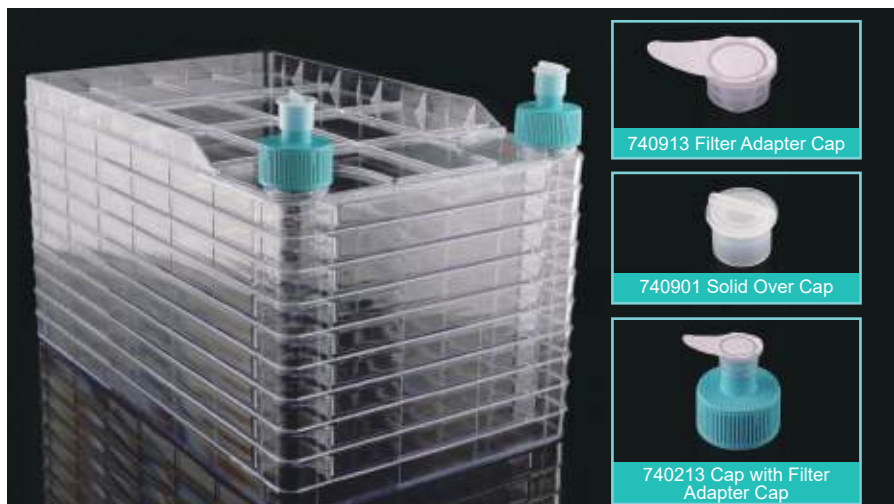
Large mouth design for easy pouring of the medium directly;

Small mouth design for easy connection with the feeding systems;

Vent Cap : 0.22 µm hydrophobic gas permeable membrane, hindering bacteria and water, can also avoid liquid swelling.

BioFactory

BioFactory (Cap with Over cap)



Vented Overcap and Solid Overact can be used directly on the adaptor caps to block dust and bacteria. Vented Overcap is equipped with a 0.22 μm hydrophobic breathable membrane to achieve aseptic ventilation during liquid transfer.

Layer	Description	Comes with Vented Overcap	/Case	Cat.No.
10	2 Sterile Vented over caps	12	6	771322
40	2 Sterile Vented over caps	4	2	771422

BioFactory (-20°C Frost Resistance)



The NEST freeze-resistant BioFactory adopts a dispensing technique to glue different layers, thus its freeze resistance is upgraded. It can withstand freezing at $-18 \sim -20^{\circ}\text{C}$, and can be repeatedly frozen and thawed three times, with better firmness.

Reminder: Due to the principle of thermal expansion and cold contraction, after the BioFactory uses a sealed cap to fill the culture media and freezes, the bottom or top layer may be slightly deformed. This is an inevitable and normal phenomenon, and there will be no leakage and will not affect normal use.

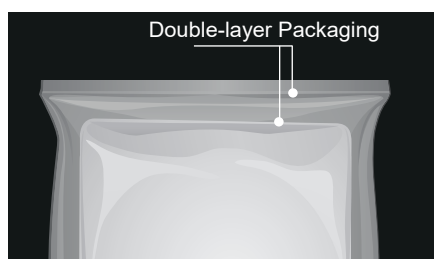
Layer	Cultivation Area (cm^2)	Dimension (mm)			Seal Caps	Vent Filter Caps	Package	Cat.No.
		Length	Width	Height				
2	1264	335	205	63	16	16	Double bag package, 1 pc / bag, 8 pcs / case	771191
5	3160	335	205	114	8	8	Double bag package, 1 pc / bag, 4 pcs / case	771294
10	6320	335	205	201	12	12	Double bag package, 1 pc / bag, 6 pcs / case	771392



Structural Features

- Cap: the mold for cap is specifically designed. The cap is formed through one-shot moulding without inner gasket, enabling it closer attached to the body for better sealing performance.
- Bottleneck: smooth buckle design reduces residue inside.
- Body: it has high transparency, high mechanical strength, strong impact resistance, and is convenient for observation and transportation. The smooth inner surface minimizes the residue on the inner wall. And the thickness of the bottle wall is uniform for better anti-crack and anti-puncture capacity.
- Bottom: the bottom has curved inner corners that are easy to clean, and the bottom is injection molded with raw material information

Applicable temperature: PC material: -80°C to 120°C / PET & PETG materials: -80°C to 120°C



Double-layer Packaging



Large double-layer packaging



Tray package

Double-layer Packaging

- Enhanced protection: double-layer packaging offers additional protection for safety in case the bottles were damaged by external forces such as extrusion, vibration, and collision during transportation.
- Improved durability: double-layer packaging ensures durability and a longer service life.
- Compliance: in line with material entry requirements of the GMP purification workshop of the biological laboratory.

Double-layer Large Packaging

- Economical and cost-effective: reducing costs of packaging and labor
- Improve efficiency: reducing the redundant loading and unloading operations for industrial customers when filling liquid, spurring the efficiency and reducing the labor intensity.

Tray-packed

- The tray-packed bottles features an one-piece plastic sealing coating by packaging equipment, which ensures better protection and less collision between and prevents contamination and loss.
- High space utilization by stacking.

Volume (mL)	Double-layer Packaging					Double-layer Large Packaging				Tray package			
	/Pack	/Case	PET	PETG	PC	/Pack	/Case	PET	PETG	/Pack	/Case	PETG	PC
30	5	40	/	354111	354314	40	240	/	354114	40	280	354113	354313
60	6	48	354611	354511	354714	40	200	354614	354514	40	200	354513	354713
125	6	48	353611	353511	353314	24	96	353614	353514	24	96	353513	353313
250	6	48	352611	352511	352314	30	120	352614	352514	30	60	352513	352313
500	8	24	333001	333511	333314	20	80	333004	333514	20	40	333513	333313
500 (Square shoulder design)	8	24	333621	/	/	20	80	333624	/	/	/	/	/
1000	4	12	334001	334511	334314	12	48	334004	334514	12	24	334513	334313
2000	1	12	/	355114	355314	/	/	/	/	/	/	/	/
5000	1	6	/	/	355714	/	/	/	/	/	/	/	/
10000	1	2	/	/	357314	/	/	/	/	/	/	/	/
20000	1	2	/	/	357714	/	/	/	/	/	/	/	/

Carboy



Product Description

The barrel, the tap and the screw cap of the carboy are made from polypropylene (PP) and the gasket is made from thermoplastic elastomer (TPE), all of which are autoclavable for sterilization before use to prevent the growth of bacteria and other microorganisms. It is mainly used for storing and dispensing solutions, culture medium, also ideal for sterile water. The barrel is moulded with a 1-gallon or 5 liter scale markings for easy identification of liquid levels during operation. The sealing performance is secured by the TPE gasket and the thread on the finish, which is well matched to the cap.

The NEST 83B three-port cap is designed for carboy closed systems and is autoclavable (tubing not recommended during sterilization). It is compatible with containers using 83B caps. The cap features three ports for connecting air filters, inlet/outlet tubing, and other fluid transfer accessories.

Application

- Storage container for raw pharmaceutical materials or culture media that require autoclaving sterilization.
- Storage container for bulk raw pharmaceutical materials or other substances.
- storage container for sterile water.

Three-Port Cap Features

- Can withstand high-temperature and high-pressure sterilization (121 °C, 20 min).
- Suitable for use on storage carboys or bottles equipped with an 83B cap.
- Three ports on the top of the cap are designed to meet different customer needs.
- Storage container for sterile water.

Volume (L)	With Handle	Sterilization	/Case	With Tap	Without Tap
10	YES	NO	4	789001	/
10	YES	NO	6	/	789011
20	YES	NO	3	789101	789111

Note:

This product is non-sterile; customers can clean, assemble, and sterilize it themselves, helping to reduce costs.

Carboy Accessories

Product	Sterilization	/Pack	/Case	Without Tap
83B 3-Port Cap, 1/4"ID Inlet and Outlet Ports, 1/4" Vent Filter Port, Non-Sterile	NO	1	2	789901
83B 3-Port Cap, 1/2"ID Inlet and Outlet Ports, 3/8" Vent Filter Port, Non-Sterile	NO	1	2	789911

Note:

If the faucet needs to be autoclaved, please remove the large bottle from the spout and sterilize it separately, and then install it after sterilization; the recommended sterilization condition is 121 °C for 15mins.

When using the faucet, please avoid over-turning the faucet, the switch is usually angled at 60° to allow for fully closed to fully open.

TriSteri™

TriSteri™ Ultra-low Particulate Collection

Product overview

For conventional standard packaging, contaminants attached to the outer surface of packaging bags may inadvertently enter cleanroom areas.

NEST Tristeri triple-layer packaged products comply with GMP standards and are designed for critical GMP applications such as large-scale cell culture, aseptic filling of bulk solutions, API sampling, formulation filling, and key reagent transfer. The outer packaging prevents contaminants from contacting sensitive production areas, significantly enhancing sample handling safety in sterile environments and meeting the growing demands of cleanroom operations.



Product Quality Inspection

- Each batch of products undergoes insoluble particle testing according to the Chinese Pharmacopoeia.
- All products undergo two visual inspections to ensure that every product leaving the facility is free from visible foreign substances.
- Each minimum packaging is labeled with a batch number for easy quality inquiries.



Accreditation Certifications

- Compliant with ISO 13485 (Medical Device Quality Management System) and ISO 9001.
- Sterility Assurance Level (SAL) reaches 10⁻⁶, free from DNase/RNase, endotoxins, and cytotoxicity.



Production Environment

- Comply with GMP standards. Products are produced and packaged in Class 100,000 cleanroom and partial Class 1000,000 cleanroom.
- Packaging materials are produced in Class 10,000 cleanroom.

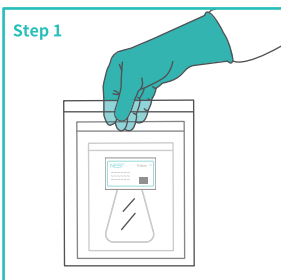


Raw Material Verification

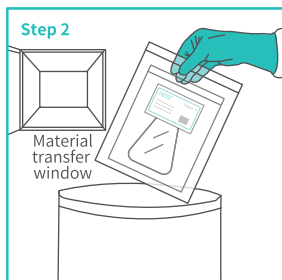
- All injection molded components are made from medical-grade materials.



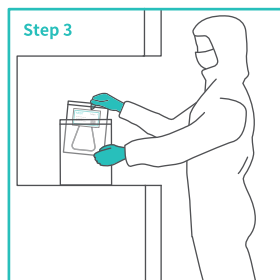
Instructions for Use



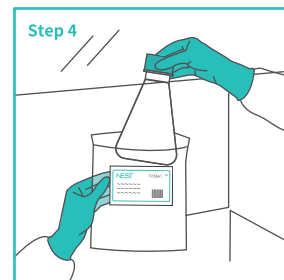
Step 1
Inspect the product's appearance and packaging integrity. Check the information on the label, such as expiration date and batch number.



Step 2
For unsterile environment In a non-clean environment, open the outermost packaging and transfer the two inner bags to the Material Delivery Window for sterilization.



Step 3
For sterile environment Open the second inner bag carefully in the cleanroom. Remove the innermost packaging from the second inner bag, transferring it to the sterile operation table.



Step 4
For sterile operation station Open the final layer of packaging in the sterile operation table and remove the required consumables.

Triple Packed Products for clean room applications

Triple packed products are used where sterile transfer of products is essential. Contamination adhering to the outside of the bag can be carried into clean room areas with single packaging. Therefore, all single packed materials must be wiped clean with 70 % alcohol or other disinfectant. Triple packed products eliminate the need for such cleaning procedures. It prevents contamination from reaching highly sensitive production areas, simplify handling and reduce processing time.

Order Information

Product	Description (sterile, TriSteri™)			Triple Packaging			Cat.No.
	Specification	Cap	Other	Pcs/Pk	Pk/Cs	Pcs/Cs	
Cell Culture Plates	6 Well	/	Clear, Flat Bottom, TC	1	40	40	703009
	24 Well	/	Clear, Flat Bottom, TC	1	40	40	702009
	48 Well	/	Clear, Flat Bottom, TC	1	40	40	748009
	96 Well	/	Clear, Flat Bottom, TC	1	100	100	701009
Cell Culture Dish	100*20 mm	/	TC	1	60	60	704009
	150*25 mm	/	TC	1	60	60	715009
Cell Culture Flask	25 cm ²	Vent Cap	TC	1	150	150	707009
	75 cm ²	Vent Cap	TC	1	50	50	708009
	150 cm ²	Vent Cap	TC	1	40	40	720009
	175 cm ²	Vent Cap	TC	1	40	40	709009
	225 cm ²	Vent Cap	TC	1	25	25	721009
5 - Layer Cell Culture Flask	5-Layer(100-150)	Vent Cap	TC	1	8	8	731009
3 - Layer Cell Culture Flask	3-Layer(60-100)	Vent Cap	TC	1	10	10	731309
Erlenmeyer Flask	125 mL	Seal Cap	PC, Flat Bottom	1	12	12	781109
	250 mL	Seal Cap	PC, Flat Bottom	1	12	12	782109
	500 mL	Seal Cap	PC, Flat Bottom	1	12	12	783109
	1000 mL	Seal Cap	PC, Flat Bottom	1	6	6	784109
	125 mL	Vent Cap	PC, Flat Bottom	1	12	12	781119
	250 mL	Vent Cap	PC, Flat Bottom	1	12	12	782119
	500 mL	Vent Cap	PC, Flat Bottom	1	12	12	783119
	1000 mL	Vent Cap	PC, Flat Bottom	1	6	6	784119
	125 mL	Seal Cap	PC, Baffled	1	12	12	781209
	250 mL	Seal Cap	PC, Baffled	1	12	12	782209
	500 mL	Seal Cap	PC, Baffled	1	12	12	783209
	1000 mL	Seal Cap	PC, Baffled	1	6	6	784209
	125 mL	Vent Cap	PC, Baffled	1	12	12	781219
	250 mL	Vent Cap	PC, Baffled	1	12	12	782219
	500 mL	Vent Cap	PC, Baffled	1	12	12	783219
	1000 mL	Vent Cap	PC, Baffled	1	6	6	784219
	1000 mL	Vent Cap	PC, Baffled	1	6	6	784019
High Efficiency Erlenmeyer Flask	2000 mL	Seal Cap	PC, Flat Bottom	1	4	4	785109
	3000 mL	Seal Cap	PC, Flat Bottom	1	4	4	786109
	3000 mL	Seal Cap	PC, Flat Bottom	1	4	4	786509
	5000 mL	Seal Cap	PC, Flat Bottom	1	4	4	787009
	2000 mL	Vent Cap	PC, Flat Bottom	1	4	4	785119
	3000 mL	Vent Cap	PC, Flat Bottom	1	4	4	786119
	3000 mL(Wide Mouth)	Vent Cap	PC, Flat Bottom	1	4	4	786519
	5000 mL	Vent Cap	PC, Flat Bottom	1	4	4	787019
	2000 mL	Seal Cap	PC, Baffled	1	4	4	785129
	3000 mL	Seal Cap	PC, Baffled	1	4	4	786129
	3000 mL(Wide Mouth)	Seal Cap	PC, Baffled	1	4	4	786529
	5000 mL	Seal Cap	PC, Baffled	1	4	4	787029
	2000 mL	Vent Cap	PC, Baffled	1	4	4	785139
	3000 mL	Vent Cap	PC, Baffled	1	4	4	786139
	3000 mL(Wide Mouth)	Vent Cap	PC, Baffled	1	4	4	786539
	5000 mL	Vent Cap	PC, Baffled	1	4	4	787039

Order Information

Product	Description (sterile, TriSteri™)			Triple Packaging			Cat.No.
	Specification	Cap	Other	Pcs/Pk	Pk/Cs	Pcs/Cs	
BioFactory	2 Layer	Two wide mouths	TC	1	8	8	771109
	2 Layer	Two wide mouths, Vent Cap	TC	1	8	8	/
	5 Layer	Two wide mouths	TC	1	4	4	771209
	5 Layer	Two wide mouths, Vent Cap	TC	1	4	4	/
	10 Layer	Two wide mouths	TC	1	6	6	771309
	10 Layer	Two wide mouths, Vent Cap	TC	1	6	6	/
Cryogenic Tubes	1.0	External Thread	/	5	40	200	618909
	1.5	External Thread	/	5	40	200	606909
	2.0	External Thread	/	5	40	200	607409
	4.0	External Thread	/	5	40	200	608409
	5.0	External Thread	/	5	40	200	609409
Centrifuge Tube	15	/	/	5	50	250	601009
	50	/	/	5	50	250	602009
250/500mL Centrifuge Tube	250	Seal Cap	/	2	16	32	622009
	500	Seal Cap	/	2	12	24	623009



Biobank System

Cryogenic Tubes

Cryogenic tubes, also known as freezing tubes, are commonly used for low-temperature preservation. They are a crucial laboratory consumable in the biological, pharmaceutical, food, and other industries. Made of medical-grade polypropylene (PP), cryogenic tubes can withstand low temperatures down to minus 196°C in a liquid nitrogen gas phase environment. They are available in three types: cryogenic tubes (without 2D barcode), 2D barcode cryogenic tubes and 3-code cryogenic tubes.



✓ High-quality raw materials:

Top quality and food grade resin is adopted, which complies with USP Class VI, pharmaceutical and laboratory standards, is adopted. It contains much lower concentrations of trace element extractables than glass.

✓ **High-Precision Technology**: Equipped with high-precision injection-stretch-blow molding equipment and automated equipment for manufacturing.

✓ **Multiple Specifications**: Multiple specifications are available to meet various requirements. We offer standard cryotubes, cryotubes with QR codes, and cryotubes with triple-codes. These are available in both regular box packaging and SBS format for automation.

✓ **High Quality Standards**: Certified by ISO13485 and ISO 9001, with batch stability.

✓ **Economical and Environmentally Friendly**: Some products are reusable and extremely durable, reducing the waste of disposable containers and preventing the leakage of harmful substances, making them environmentally friendly.

Complete stability and safety verification reports

Manufacturing enterprise certification		Production process, quality standards, storage, transportation and use verification		Testing by third-party authoritative professional inspection and testing organizations	
Qualification certificate	ISO 9001, ISO13485	Process test	Injection molding machine, mold performance verification	Biological testing GB/T16886.5-2017 GB/T16886.4-2003 GB/T16886.10-2017 GB/T16886.11-2021	In vitro cytotoxicity test
	FDA, CE		Sealing test		Skin sensitivity test
	Irradiation ISO 13485, ISO 11137		Cryogenic test		Skin irritation test
Sterility testing laboratory Environmental testing	ISO 7 requirements	Performance test	High-temperature sterilization test	Physical and chemical testing GB/T14233.1-2008	Acute systemic toxicity test
	GB 50591-2010		DNase/RNase		Hemolysis test
	GB/T 16294-2010		Endotoxin		Heavy metal content of materials Pb, Sn, Cd, Cr
Level 100000 clean workshop environmental testing	ISO 8 requirements	Sterility and particle assurance	Bottom 2D barcode integrity test	Leachable testing	Reducing substances
	GB 50073-2013		Irradiation process verification		pH
	YY0033-2000		Sterile packaging verification		Evaporation residue
Purified Water System Validation	GMP requirements		Product sterility test		UV absorbance
Raw material verification	Physical and chemical testing		Insoluble particle detection		
	Extractable testing		Drop and transportation verification		

Cryogenic Tubes



• Volume optimization

Volume selection based on quantity and type of sample.



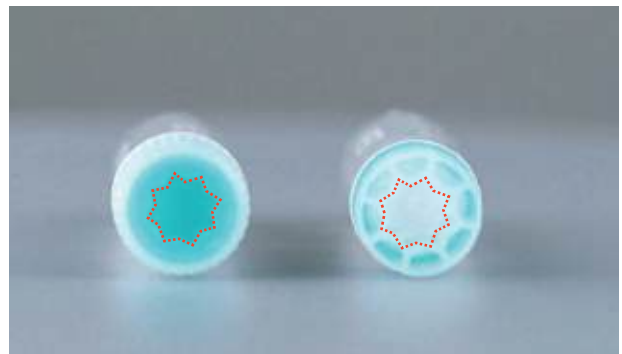
• Improved sealing ability

Soft rubber sealing surface design, passing vacuum test, ensuring sample safety.



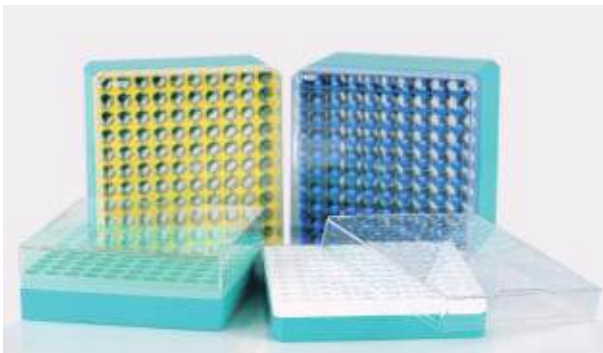
• Material upgrade

New polymer material, improved cryogenic and anti-aging performance, high-temperature and high-pressure sterilization.



• Suitable for automation

"Eight-petal plum" design, reduces manual process, contamination risk, and labor cost.



• More specifications

Filling gap for 4 mL, 5 mL, and 10x10 box series, meeting various research needs.



• Multi-color cap inserts

Color-coded cap inserts for easy sample identification.

Cryogenic Tubes



Cap Type	External thread cap					Internal thread cap			
Volume (mL)	1.0	1.5	2.0	4.0	5.0	1.5	1.8	4.0	5.0
Overall height (mm)	46	40.7	45.5	76.3	93.3	40.7	45.5	76.3	93.3
Size parameters (mm)	5.3	10				8.3			
Outer diameter Φ (mm)	8.85	12.85				12.10			
Temperature Range	-196 to 121°C					-196 to 121°C			

Notes:

1. After removing cryogenic vials from liquid nitrogen, use the NEST thawing device to ensure better QR code recognition.
2. Due to varying densities of freezing media, it is recommended that the filling volume not exceed 90%.
3. Make sure the cap is tightly closed before freezing to prevent liquid nitrogen from entering.
4. Always wear proper protective equipment when handling vials from liquid nitrogen to ensure laboratory safety.

Storage conditions: Temperature range: -196 °C (with screw cap) to 121 °C.

All polypropylene tubes are suitable for low-temperature storage, except direct immersion in liquid nitrogen.

Warning: Do not immerse NEST sample tubes directly in liquid nitrogen. Liquid nitrogen can seep inside and cause tube rupture and sample loss. Storage in the vapor phase of liquid nitrogen is recommended.



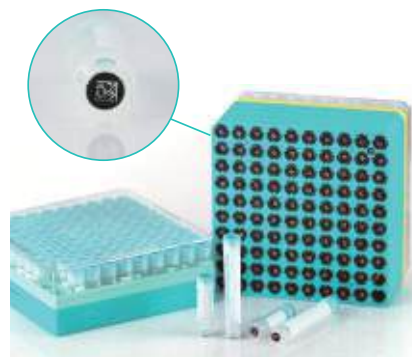
Cryogenic Tubes



Bag Package



Rack Package



2D Barcode Cryogenic Tubes

Cryogenic Tubes (without 2D barcode) – Bag Package

	Cat. No.	Volume (mL)	Cap Type	/Pack	/Case	Compatible Cap Inserts No.
SBS	618901	1.0	External thread	50	500	none
	606901	1.5	External thread	50	500	61120x series
	607401	2.0	External thread	50	500	61120x series
	608401	4.0	External thread	50	250	61120x series
	609401	5.0	External thread	50	250	61120x series
	606801	1.5	Internal thread	50	500	61120x series
	607301	1.8	Internal thread	50	500	61120x series
	608301	4.0	Internal thread	50	250	61120x series
	609301	5.0	Internal thread	50	250	61120x series

Cryogenic Tubes - Rack Package

	Cryogenic Tubes Cat. No.	2D Barcode Cryogenic Tubes	Volume (mL)	Cap Type	Packaging	/Rack	Racks/Case	Compatible Cap Inserts No.
	606902	606952	1.5	External thread	10*10	100	14	61120x series
	607402	607452	2.0	External thread	10*10	100	12	61120x series
	608402	608452	4.0	External thread	10*10	100	8	61120x series
	609402	609452	5.0	External thread	10*10	100	6	61120x series
	606802	606852	1.5	Internal thread	10*10	100	14	61120x series
	607302	607352	1.8	Internal thread	10*10	100	12	61120x series
	608302	608352	4.0	Internal thread	10*10	100	8	61120x series
	609302	609352	5.0	Internal thread	10*10	100	6	61120x series
SBS	618906	/	1.0	External thread	8*12	96	10	none
	/	612891	2.0	External thread	6*8	48	10	61120x series
	/	614591	4.0	External thread	6*8	48	10	61120x series

SBS Format Cryogenic Tubes

Sealing design

- New sealing structure design, optimized sealing performance, better liquid nitrogen sealing, smoother feel.

High-quality raw materials

- Made of medical-grade high-purity polypropylene, ultra-high rigidity toughening material, excellent weather resistance, compliant with ISO10993 standards.
- No DNase, no RNase, no endotoxin.

Encoding rules

- Three-code-in-1 composed of DATAMATRIX code, barcode and readable code, laser-etched on the bottom and side of the tube.
- Codes are high contrast for easy reading, scratch-resistant, not easy to fall off, resistant to DMSO and other organic solvents.
- High uniqueness of laser-etched international standard DATAMATRIX codes.

At the same time, NEST can customize exclusive encodings. If you have any requirements, please contact us. For more information, please visit our official website at www.cell-nest.com.

Quality assurance

- Produced in GMP 100,000-level clean room certified according to ISO 9001, ISO 13485 quality system certification.
- Strict production process, well-developed management system to ensure batch quality stability.

Sterility assurance

- E-beam sterilization, SAL=10⁻⁶.

Box features

- Cryogenic box identifier code: We have a unique QR code at the bottom of the rack and a one-dimensional barcode laser engraved on the side of the rack. When reading the cryogenic tube information, the box information is also read automatically.
- Box lid buckle: The cryogenic box is designed with a buckle which can be tightly fitted with the box to prevent scattering when dropped. The buckle switch is also convenient, even if frozen in liquid nitrogen will not fail to ensure sample safety.



External thread cap

Internal thread cap

SBS Format Cryogenic Tubes



Cap Type	External thread cap							Internal thread cap		External thread cap	
Volume (mL)	0.5	0.75	1.0	2.0	4.0	6.0	8.0	0.5	1.0	4.0	1.9
Overall height (mm)	27.6	37.3	45.6	45.5	76.3	57.5	71.7	33.5	51.4	76.76	42.96
Size parameters (mm)	5.3			10		10.3		6.55			
Outer diameter Φ (mm)	8.85			12.85		17.8		8.7		12.8	
Temperature Range	-196 to 121°C							-196 to 121°C			

Notes:

1. After removing cryogenic vials from liquid nitrogen, use the NEST thawing device to ensure better QR code recognition.
2. Due to varying densities of freezing media, it is recommended that the filling volume not exceed 90%.
3. Make sure the cap is tightly closed before freezing to prevent liquid nitrogen from entering.
4. Always wear proper protective equipment when handling vials from liquid nitrogen to ensure laboratory safety.

Storage conditions: Temperature range: -196 °C (with screw cap) to 121 °C.

All polypropylene tubes are suitable for low-temperature storage, except direct immersion in liquid nitrogen.

Warning: Do not immerse NEST sample tubes directly in liquid nitrogen. Liquid nitrogen can seep inside and cause tube rupture and sample loss. Storage in the vapor phase of liquid nitrogen is recommended.

SBS 3-Code Cryogenic Tubes - Bag Package



Bag Package

Cat. No.	Volume (mL)	Cap Type	/Bag	/Case	Compatible Cap Inserts No.
612541	0.5	External thread	96	10	None
612641	0.75	External thread	96	10	None
612741	1	External thread	96	10	None
612841	2	External thread	48	10	61120x series
614541	4	External thread	48	10	61120x series
614641	6	External thread	24	10	61120x series
614741	8	External thread	24	10	61120x series
612521	0.5	Internal thread	96	10	None
612721	1	Internal thread	96	10	None

SBS 3-Code Cryogenic Tube - Rack Package



Rack Package

Cat. No.	Volume (mL)	Cap Type	/Rack	Racks /Case	Compatible Cap Inserts No.
612551	0.5	External thread	96	10	None
612651	0.75	External thread	96	10	None
612751	1	External thread	96	10	None
612851	2	External thread	48	10	61120x series
614551	4	External thread	48	10	61120x series
614651	6	External thread	24	10	61120x series
614751	8	External thread	24	10	61120x series
612531	0.5	Internal thread	96	10	None
612731	1	Internal thread	96	10	None

Cap Inserts / Cryogenic Box

Cap Inserts



Color	Sterilization	Quantity/Bag	Bags/Case	Cat. No. (NEW)
White	No	100	10	611201
Red	No	100	10	611202
Yellow	No	100	10	611203
Blue	No	100	10	611204
Green	No	100	10	611205
Purple	No	100	10	611206

***Note:**

New Cap Inserts are compatible with new cryogenic tubes.

New Cap Inserts do not match 1ml, 0.75ml, 0.5ml cryogenic tubes, but all other sizes do.

Nest new version/upgraded cryogenic vials to work with NEST's latest collection of Cryogenic Vials.

Cryogenic Box



1.5 mL

2.0 external thread
1.8 internal thread

4.0 mL

5.0 mL



3-Code-in-1 Cryogenic Vial

- PC transparent cover, PC-ABS high-strength composite material base.
- Temperature range from -196°C to 70°C.
- Alphanumeric grid for easy sample labeling and identification.
- Each box contains drainage holes and vents, which accelerate the discharge of cold air and reduce condensation.
- Packaging with independent product and batch identification for quality traceability.

Cryogenic Box

Compatible Cryogenic Tube Capacity (mL)	Format (Holes)	Size (L x W x H)	Color	Sterilization	Quantity/Box	Cat. No.
1.5	10*10	133.6×133.6×44	White	No	14	616651
2.0 external thread/1.8 internal thread	10*10	133.6×133.6×48.8	Green	No	12	616051
4.0	10*10	133.6×133.6×79.5	Yellow	No	8	616151
5.0	10*10	133.6×133.6×96.5	Blue	No	6	616551

3-Code-in-1 Cryogenic Vial

Compatible Cryogenic Tube Capacity (mL)	Format (Holes)	Size (L x W x H)	Sterilization	Quantity/Box	Cat. No.
0.5 external thread	12*8	127.8×85.3×30.3	No	10	616211
0.5 internal thread	12*8	127.8×85.3×30.3	No	10	616212
0.75 external thread	12*8	127.8×85.3×40.3	No	10	616711
1.0 external thread	12*8	127.8×85.3×48.3	No	10	616361
1.0 internal thread	12*8	127.8×85.3×54.3	No	10	616362
2.0 external thread	8*6	127.8×85.3×48.3	No	10	616041
4.0 external thread	8*6	127.8×85.3×79.8	No	10	616141
6.0 external thread	4*6	127.8×85.3×60.4	No	10	616841
8.0 external thread	6*4	127.8×85.3×75.2	No	10	616891

*Nest new version/upgraded cryogenic vials to work with NEST's latest collection of Cryogenic Vials.

Vertical Freezer Racks



Cat. No.	Size (mm)	Maximum number of boxes	Size of boxes (mm)	Pcs/Case
200301	454H x 143D x 140W	8	133x133x51	6
200302	677H x 143D x 140W	12	133x133x51	6
200303	724H x 143D x 140W	13	133x133x51	6
200304	789H x 143D x 140W	14	133x133x51	6
200305	845H x 143D x 140W	15	133x133x51	6



Cat. No.	Size (mm)	Maximum number of boxes	Size of boxes (mm)	Pcs/Case
200321	492H x 143D x 140W	6	133x133x75	6
200322	653H x 143D x 140W	8	133x133x75	6
200323	724H x 143D x 140W	9	133x133x75	6
200324	814H x 143D x 140W	10	133x133x75	6



Cat. No.	Size (mm)	Maximum number of boxes	Size of boxes (mm)	Pcs/Case
200341	413H x 143D x 140W	4	133x133x98	6
200342	616H x 143D x 140W	6	133x133x98	6
200343	717H x 143D x 140W	7	133x133x98	6



Sample Freezing Recommendations

! Safety Risks and Recommendations:

NEST cryogenic vials are made of polypropylene (PP), which has good chemical resistance and low-temperature performance. The temperature range for using cryogenic vials is -196°C to 121°C. They can be sterilized at high temperature and high pressure or placed in liquid nitrogen vapor.

However, it is not recommended to store them in liquid nitrogen due to the risk of cross-contamination. Liquid nitrogen has very low surface tension, which can cause it to flow into tightly capped cryogenic vials. After removing a cryogenic vial, residual liquid nitrogen may vaporize, creating explosion and injury risks.

If the sample has already been stored in the liquid phase of liquid nitrogen, the following measures are recommended to reduce the risks:

- Place the cryogenic box and cryogenic vial in liquid nitrogen vapor phase for 24 hours before removing from the liquid nitrogen tank to allow the liquid nitrogen to evaporate.
- When handling, be sure to wear protective goggles and gloves to prevent cryogenic vial rupture.
- Add a cryogenic vial sleeve before freezing the sample.

Please note that correct use and storage of cryogenic vials are critical steps to ensure the quality and safety of biological samples. Therefore, please follow the correct operating procedures and safety measures when using and storing cryogenic vials to ensure the reliability of biological sample quality and research results.

• Preserving Sample Activity



- When handling low-temperature samples, it plays the role of a portable refrigerator, quickly cooling and temporarily stabilizing the temperature, maximizing the preservation of cell, nucleic acid, protein, and other sample activities.
- Suitable for tissue culture incubators, biosafety cabinets, and other limited space situations.

Ice Free Cool Box

Product number	Size (mm)	Weight (g)	Application
200103	152x170x123	1300	Includes 200902 ice core and 2mL module 200904
200901	152x170x123	140	Without ice core and module, multiple cooling sources and modules can be selected.

Ice Core

Product number	Product name	Temperature range	Freezer temperature	Freezing time	Size (mm)
200902	Cold core	0.5°C~4°C	-20°C	4h+	105 x 100 x 26
		0.5°C~4°C	-80°C	2h+	105 x 100 x 26
200903	Freezing core	-18°C~4°C	-20°C	6h+	105 x 100 x 26
		-18°C~4°C	-80°C	3h+	105 x 100 x 26

Module

Product number	Product name	Size (mm)	Application
200904	2 mL module	119*101*38	30 holes for 2 mL cryogenic vials
200905	1.5 mL module	119*101*38	48 holes for 1.5 mL cryogenic vials
200906	5 mL module	119*101*38	30 holes for 5 mL cryogenic vials
200907	PCR module	119*101*38	96 PCR holes



- Used for freezing various cell types, including stem cells, primary cells, cell lines, and yeast, etc.
- "Slow freezing" to protect cell activity; just place in a -80°C freezer to make the sample cool down 1°C per minute.
- Zero addition and zero emissions, permanent use, and responds to the call of environmental protection.

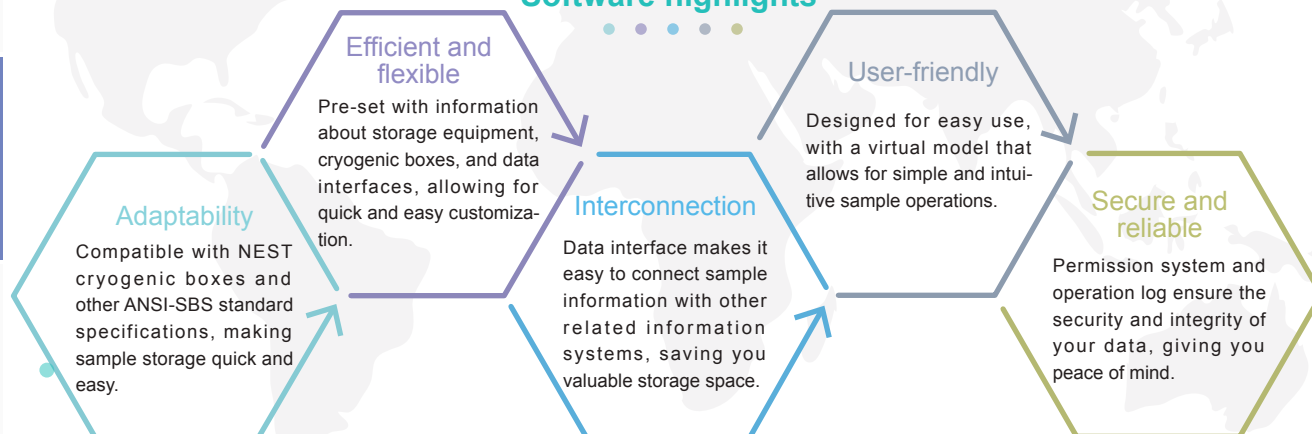
Cell Freezing Box

Product number	Shap	Specifications (mm)	Application
200101	Hexagonal	S108X100 (S: Side Length)	Holds 1 mL/2 mL cryogenic tubes or microcentrifuge tubes(12-φ13)
200102	Square	117X117X100	

Sample Management Software

NEST Sample Management System (SMS) is a comprehensive sample information management system for laboratories, medical units, and scientific research institutions. It streamlines multiple steps in the sample information process, including pre-processing, storage, queries. NEST SMS supports custom configurations according to on-site needs, without the need for special customization development. It links functional modules efficiently, ensuring simple and smooth inbound and outbound steps, complete information, and reducing the workload and human error risks associated with sample library management.

Software highlights



Basic Functional Modules

- Regional equipment: visual equipment structure overview
- Sample management: custom, pre-entry, sample storage and retrieval
- Query and statistics: query and statistics of samples by location, custom fields, association information, and scanning
- Data management: data backup, batch editing of samples
- Associated information: can be docked with HIS, LIS, PACS, and other information systems to quickly improve sample information and save local space
- Label printing: human-readable barcodes and custom adhesive labels can be added
- Settings: custom storage equipment (refrigerator, liquid nitrogen tank, freezer rack, cryogenic box), custom sample information, user role settings, etc.

Advanced Functions

- Pre-set SQL Server, Oracle, MySQL data interface
- Quick association pre-entry
- Custom sample number, encoding rule settings
- User permission management, log information inquiry
- Label printing scene settings.



Product Number	Product Specification
106131	NEST Sample Management Software-20 terminal devices
106132	NEST Sample Management Software-15 terminal devices
106133	NEST Sample Management Software-10 terminal devices
106134	NEST Sample Management Software-5 terminal devices
106135	NEST Sample Management Software-3 terminal devices

Single-Rack Reader

The NEST Single-rack reader is a device that rapidly decodes entire boxes of biological samples in biobanks and high-throughput laboratories. It is lightweight, compact, and can quickly decode various types of cryogenic boxes on-site. The device can simultaneously decode the entire box and read the cryogenic box code. When used with the NEST sample management software, it can directly decode and store entire boxes of samples. The device was granted a utility model patent in 2020.

Cryogenic box plate rack

Decoding entire boxes of cryogenic tubes

- Decoding rules can be customized according to the cryogenic box specification (8*12, 6*8, 5*5, 9*9, 10*10, etc.)
- Non-standard decoding area can be specified for each position.

Cryogenic box code

- Can be a one-dimensional or two-dimensional barcode on any side of the cryogenic box or a two-dimensional code at a certain position on the bottom of the cryogenic box.
- Cryogenic box code decoding does not require an external device.
- Cryogenic box code location can be automatically set by software.



Data interface

- Enabling data integration with systems such as HIS, LIS, PACS, EMR, etc.
- Open database interface can be implemented through the pre-configured Oracle, SQL Server, MySQL of the system without the need for customized development.

Matching software and interface services

- Operating system: Windows XP or higher version.
- One-click cryogenic box numbering and entire box cryogenic tube decoding.
- Cryogenic box template can be customized.
- Decoding results can be displayed through graphics, lists, and images.
- Decoding results can be exported to Excel files.
- HTTP service interface can be started with one-click to automatically generate URL addresses.
- HTTP service call return results consistent with the direct software interface operation results.

Mainframe framework

- Small and portable size: 220*175*220mm (length * width * height).
- Light weight: about 1.5 kg.
- Operating environment -20℃ ~ 35℃.

Camera

- Dust-proof and waterproof tempered glass protection above the camera
- Plug and play, no need to install drivers.

USB data cable/power switch

- Standard USB2.0 interface, no external power supply required, low power consumption (1W-4W).
- Standby power consumption less than 1W, and photo decoding power consumption is less than 4W.

Product number	106211
Product model	Single-rack reader NSSnap, English

Multi-Rack Reader

Multi-Rack Reader

- Partial scanning according to the number of cryogenic boxes.
- Scanning results in various ways such as graphics, lists, and images.
- Full-frame decoding less than 10 seconds, single-box scanning within 3-5 seconds.
- Excel export of a single box or merged multiple boxes.
- Decoding application for scanning bottom QR codes for integration (single-rack/multi-rack) based on the Windows system.
- Fast scanning of inbound and outbound barcodes, greatly improving work efficiency.
- Number and type of cryogenic boxes customization.
- Compatible with major brands of cryogenic tubes on the market.
- Compatible with various scanning racks to meet different quantity requirements.



Product number	106212
Product model	Multi-rack reader NSScanner, English
Product type	Flatbed
Maximum scanning range	216×297mm
Scanning component	CCD
Optical resolution	4800×9600dpi
Scanning speed	Full-frame scanning ≤ 6 seconds

Scanning light source	LED light source
Rack types	SBS box + traditional square box, 2 traditional square boxes, 3 SBS boxes
Product size and weight	443.5×278.6×54mm 2.14kg
Power/power consumption	220V/18W
Data interface	Provides HTTP access service to return a JSON string containing the position and cryogenic tube code
Support system	Windows2000/XP/Vista/7/10
Machine brand	EPSON

Barcode Scanner

The barcode and DATAMATRIX code on the cryogenic tube can be scanned using a barcode scanner to quickly obtain information related to the sample.

The scanning result can be directly input into the sample library management system, facilitating the subsequent sample tracking and management.

The barcode scanner has the following features: high efficiency, high accuracy, easy to operate, and strong durability.

- Quick recognition of electronic screen codes: can scan one-dimensional and two-dimensional codes and traditional paper barcodes, and has strong decoding ability for electronic screen QR codes.
- High-speed rebound button: 5 million fatigue tests, still maintaining good button effects.
- Adaptus6.0 imaging technology: upgraded barcode image acquisition technology combined with custom sensors to achieve extended depth of field and fast reading.
- Sturdy and durable shell: using a new generation of high-strength ABS materials, it can withstand a 1.5m free fall impact.
- Classic commercial appearance: loved by international brands, simple and versatile design, naturally formed.



Handheld Decapper for Cryogenic Vials



Product introduction

NEST decapper is available in 1, 8, 24, 48, and 96 channel models, suitable for use in biobanks, genetic sequencing, disease control centers, blood centers, laboratory automation, pharmaceuticals, and other industries.

Features

- Improved efficiency: significantly improves efficiency compared to manual operations
- Safety requirements: prevents laboratory personnel from contacting samples or reagents when opening or closing caps, reducing the risk of biological and chemical hazards.
- Sealing guarantee: the uniform torque design of the automated decapper prevents caps from being closed improperly or damaging the cryogenic vial due to uneven hand force.
- Wide compatibility: easily opens and closes all NEST 2D barcode cryogenic vials, and is also suitable for other brands with the same cap clasping mechanism.

Product parameters

Product name	Handheld Decapper for Cryogenic Vials
Product number	106002
Empty load speed	170rpm
Manual torque	2N.m
Electric torque	0.25-0.35N.m
Battery type	Lithium battery
Battery voltage	3.7V
Battery capacity	260mAh
Charging time	45 minutes

Cell Thawing Device



Product Introduction

To better meet the needs of applications with small sample quantities and reduce user procurement costs, NEST has launched the NEST cell thawing device, which integrates real-time temperature data display. NEST cell thawing device uses "resistive heating", "programmed temperature control", "low temperature sensing" and other technologies to achieve cell thawing and resuscitation. The built-in temperature monitoring system identifies the surface temperature of cryogenic tubes and each stage temperature during the solid-to-liquid thawing and resuscitation process. Even if there are frozen storage labels and marker pens on the surface, the thawing effect will not be affected. Customizable thawing and recovery solutions for all types of frozen cell storage tubes, whether they are stored in liquid nitrogen or at -80°C.

The thawing time of the NEST cell thawing device is basically the same as that of a water bath. It takes 1 minute to preheat, about 1 minute and 10 seconds for the melting stage, and about 1 minute and 20 seconds for the thawing and resuscitation stage. The cell survival rate of thawing and resuscitation is similar to that of a water bath.

Product Features

- Small size, less space on the workbench.
- Especially suitable for scenarios with few samples to be thawed and resuscitated.
- Has account management and data export functions
- Comes with a transfer container for transferring cryogenic tubes.

Product Name	NEST Cell Thawing Device
SKU	106007
Model	LA-G002
Throughput	2 holes, each hole can be used independently
Application	2.0ml standard cryogenic tubes
Filling volume	0.8-1.5ml
Thawing time	3 minutes
Alarm	Low temperature alarm, error operation alarm
Prompt sound	Preheating end prompt, thawing countdown prompt, thawing end prompt
Thawing and resuscitation end	Cryogenic tube pops out directly
Size (L * W * H)	23 * 14 * 16cm
Weight	3.5kg
Voltage	220V, 50Hz
Warranty	One-year warranty for the whole device

Operating procedures



01 Power on



02 Insert the cryogenic tube into the hole



03 The thawing instrument automatically thaws



03 After thawing is complete, the cryogenic tube pops out

Label Printer



BradyPrinter i5100 Label Printer

Brady i5100 label printer supports batch printing and integrates intelligent printing technology, making various complex printing tasks within your enterprise easier to accomplish.

Product Performance Advantages:

- Simple settings changes: The touch screen is easy to use for adjusting printer settings quickly.
- Comprehensive feature set: The printer has all the features needed for high-performance printing.
- Intelligent Printing (IP) technology: Software and consumables that communicate with the printer eliminate debugging after consumable replacement and allow you to get back to work quickly.
- Intelligent loading design: Specially designed ribbon rewind spools and automatic centering label roll holders make consumables easy to replace without additional steps.
- Multiple hardware options: You can use a variety of connection ports to connect to the devices you need and use replaceable rubber rollers to optimize printing effects for different labels.

Model	i5100
Handheld/Desktop	Desktop
Power Supply	100 - 240V AC, 50/60 Hz, PFC
Printing Method	Thermal transfer (300 or 600dpi) / direct thermal (300dpi - depending on material and printhead)
Printing Resolution	300 dpi / 600 dpi
Maximum Printing Width	4.16 inches (106mm)
Maximum Label Width	0.20 inches (5mm) to 4.33 inches (110mm)
Maximum Printing Speed	Maximum 11.8 inches (300mm)/second (300 dpi) Maximum 5.9 inches (150mm)/second (600 dpi)
Printing Color	Single color

Memory	256MB
Connectable to Computer	Yes
Interfaces	USB 2.0, RS232-C, Ethernet 10/100 BASE-T, SD slot
Keyboard	External
Display Screen	Color LCD touch screen
Dimensions	12.5 inches (318mm) x 9.5 inches (241mm) x 17.1 inches (434mm)
Weight	14.6 pounds (6.6kg)
Maximum Power Consumption	Standby <10W / Normal 150W / Maximum 300W
Software	Brady Workstation (v4.1 or higher) and Workstation applications, Brady LabelMark software (v6.6.1 or higher)

Consumables Number	106091	106092
Consumables Name	Cryogenic Labels	Thermo Ribbon
Consumables Model	THT-163-499-3127mm*37.4mm	IP-R4302
Packaging	3000 pcs/roll	1 roll/box

Liquid Transfer

Automation Tips

Brand T Automation Tips



Automation Conductive Tips for Brand T



Compatible with Brand T Systems

Brand T Automation Tips:

50 / 200 / 1000 µL

(Available in various packagings with or without filters)

Brand H Automation Tips:

50 / 300 / 1000 µL

(Available in various packagings with or without filters)

Compatible with Brand B Systems: 190 / 250 µL

(Available in various packagings with or without filters)

Brand H Automation Tips



Automation Conductive Tips for Brand H



Compatible with Brand H Systems

Compatible with Brand B Systems



Compatible with Brand B Systems

Advantages

- Medical-grade black conductive polypropylene (PP) materials.
- Electron beam sterilization: Safe and fast, without chemical residue.
- Uniform conductivity: Tips of the same box sharing the same cavity number ensures the product traceability and the conductivity uniformity and improves the accuracy of experimental results, greatly reducing the difference among each tip.
- The smooth inner surfaces of tips supported by the unique processing technology greatly reduces the amount of residual liquid.
- The porous filtration of filter tip ensures optimum performance. And the super hydrophobicity of the tip forms a strong barrier against aerosols thus eliminates the risk of cross-contamination among samples.
- **Strong package:** The package of thickened high-strength blister card is resistant to impact and dropping, which ensures the integrity and safety of the product under harsh transport conditions.
- **Good air tightness and adaptability:** The structure mapping is conducted as per the original adapter and the proven injection-molding ensures that the products have good air tightness and adaptability, improving the mechanical precision of the products during work.
- **Strict quality management and control test:** Class 100,000 clean workshop, effective quality inspections are conducted under strict quality management including tests for DNA, RNA, proteases, and pyrogens, satisfying clients' needs.
- Air tightness test: Precise equipment is used to test the air tightness between the tip and the adapter, to ensure good air tightness for each batch of products.
- Tests for resistance and CV values: A certain number of products are sampled for each batch for inspection, which is conducted by precise and unique measuring tools for accuracy and reliability of the test results to ensure the uniform conductivity of products.

Adaptation model

- Brand T automation conductive tips may be used with the TECAN Freedom EVOlyzers and fully automatic sampling systems.
- Brand H automation conductive tips are used in conjunction with Hamilton series workstations.
- Brand B robotic tips are used in Beckman FX/NX, Biomek i5/ i7 and Biomek 3000.

Brand T Automation Tips



Blister Packed, 96 tips *2 Blisters/Pk



Robotic Tips, Boxed



Robotic Tips, Clear, Blister Packed



Robotic Tips, Clear, Boxed

Volume (μL)	Packing			Automation Conductive Tips		Robotic Tip	
	Specification	/Pack	/Case	No Filter	Filter	No Filter	Filter
50	Blister Packed (96 Tips*2)	96	2304	332002	332012	332003	332013
	Boxed	96	4800	/	332016	332007	332017
200	Blister Packed (96 Tips*2)	96	2304	332102	332112	332103	332113
	Boxed	96	4800	/	332116	332107	332117
1000	Blister Packed (96 Tips*2)	96	2304	332202	332212	332203	332213
	Boxed	96	4800	/	332216	332207	332217

Brand H Automation Tips



Blister Packed



Boxed



Blister Packed, 96 Tips*5 Blisters/Pk



Barcode



Blister Packed



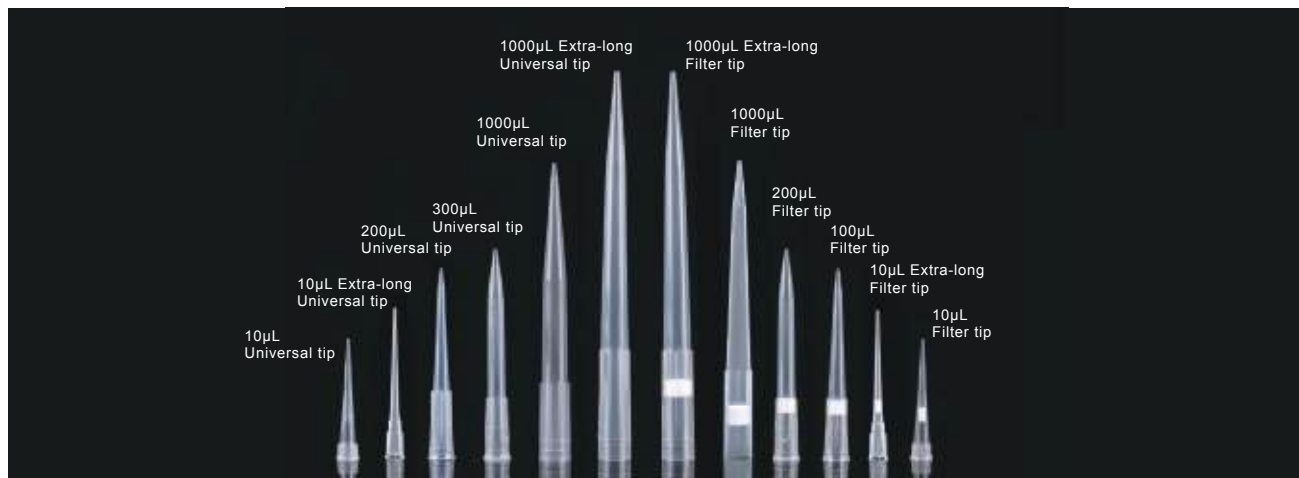
Boxed

Volume (μL)	Specification	Packaging	Automation Conductive Tips		Robotic Tip	
			No Filter	Filter	No Filter	Filter
50	Blister Packed	96 pcs/rk 24 rks/pk	345002	345012	/	/
	With Barcode, 96 Tips*5 Blisters/Pk	96 pcs/rk 60 rks/pk	345005	345015	/	/
	With Barcode, 96 Tips/Pk	96 pcs/rk 24 rks/pk	/	345013	345503	345513
	Boxed, With Barcode	96 pcs/box, 10 boxes/pk, 5 pks/cs	/	345069	345509	345519
300	Blister Packed	96 pcs/rk 24 rks/pk	345102	345112	/	/
	With Barcode, 96 Tips*5 Blisters/Pk	96 pcs/rk 60 rks/pk	345105	345115	/	/
	With Barcode, 96 Tips/Pk	96 pcs/rk 24 rks/pk	/	345113	345603	345613
	Boxed, With Barcode	96 pcs/box, 10 boxes/pk, 5 pks/cs	/	345169	345609	345619
1000	Blister Packed	96 pcs/rk 24 rks/pk	345202	345212	/	/
	With Barcode, 96 Tips*5 Blisters/Pk	96 pcs/rk 60 rks/pk	345205	345215	/	/
	With Barcode, 96 Tips/Pk	96 pcs/rk 24 rks/pk	/	345213	345703	345713
	Boxed, With Barcode	96 pcs/box, 10 boxes/pk, 5 pks/cs	/	345269	345709	345719

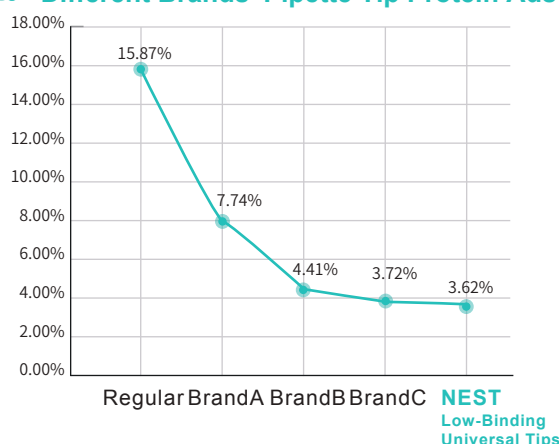
Brand B Automation Tips

Volume (μL)	Filter	Sterilization	/Box	/Inner box	/Case	Cat.No.
250	NO	YES	96	960	4800	317511
190	YES	YES	96	960	4800	317501

Low-Binding Universal Tips



● Different Brands' Pipette Tip Protein Adsorption Percentage:



Comparison of Protein Adsorption Among Different Brands of Low-Binding Tips Average Protein Concentration from 3 Measurements (µg/mL)

Native protein solution: 340.37

NEST low binding tip: 328.03

BrandA: 327.70

BrandB: 325.37

BrandC: 314.03

NEST regular tip: 286.37

Conclusion: Protein residue of NEST low-binding tips < Brand A < Brand B < Brand C < NEST regular tips.

According to the BCA assay results, NEST low-binding pipette tips exhibited the lowest protein adsorption compared to NEST regular tips and other brands of low-binding tips.

Ordering Information for Bagged Low-Binding Universal Tips (Non-sterile)

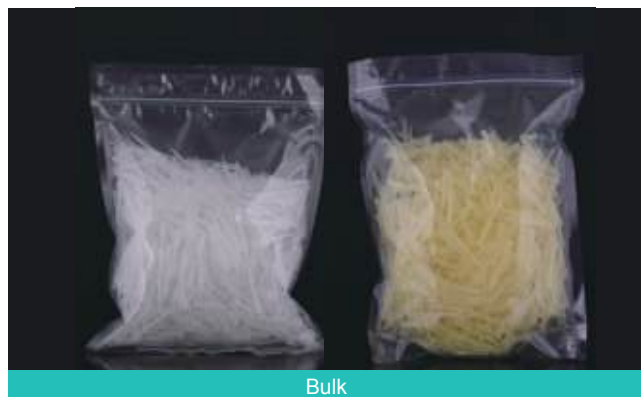
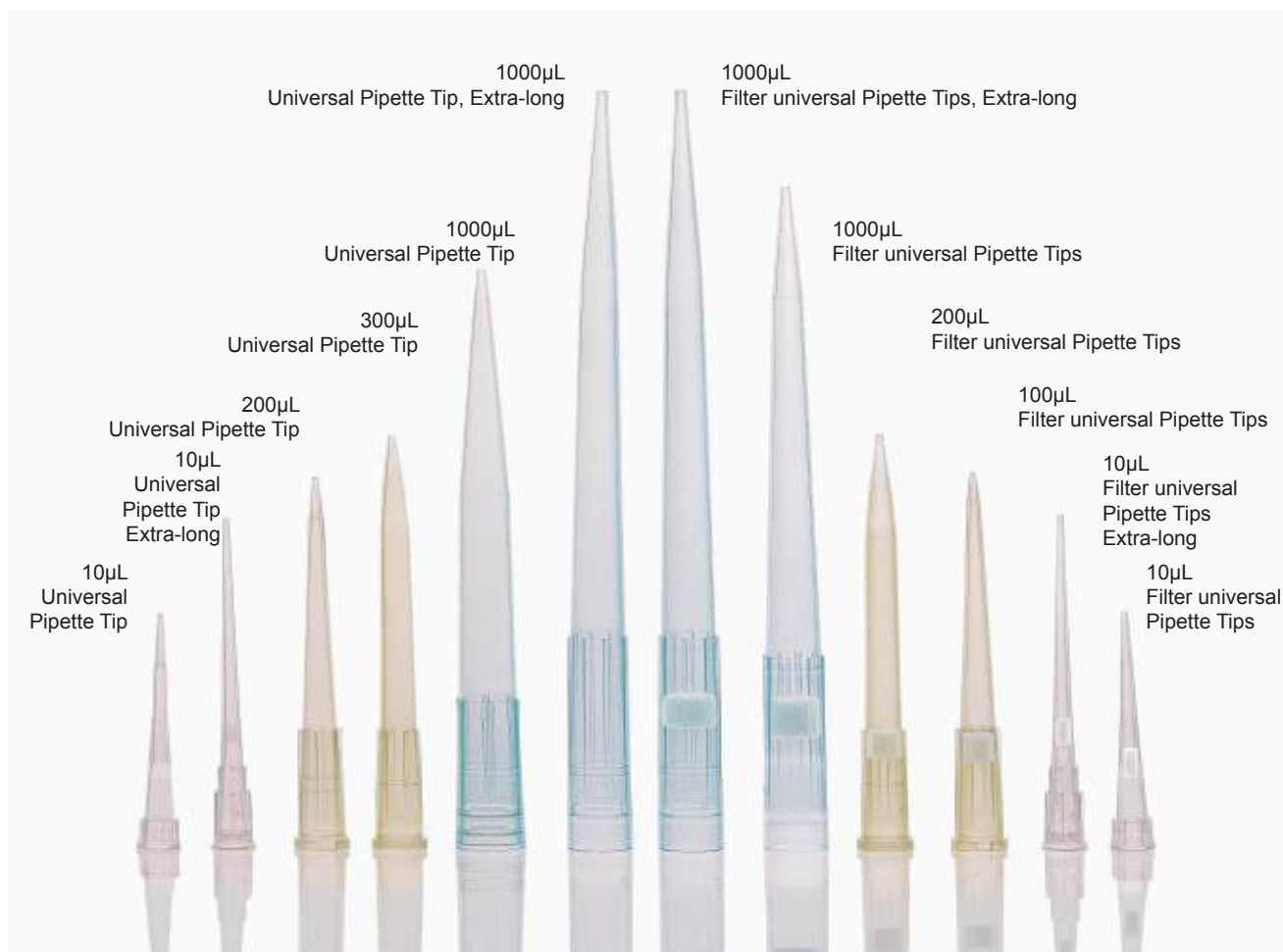
Volume(µL)	Universal Pipette Tips				Filter Universal Pipette Tips			
	Colour	/Bagged	/Case	Cat.No.	Colour	/Bagged	/Case	Cat.No.
10	Transparent	1000	10	301026	Transparent	1000	10	311021
10Extra-long	Transparent	1000	10	314001	Transparent	1000	10	314011
100	/	/	/	/	Transparent	1000	10	316021
200	Transparent	1000	10	302126	Transparent	1000	10	312021
300	Transparent	1000	10	305026	Transparent	/	/	/
1000	Transparent	1000	5	303028	Transparent	1000	5	313026
1000Extra-long	Transparent	500	10	304026	Transparent	500	10	313021

Ordering Information for Racked Low-Binding Universal Tips (Sterile)

Volume(µL)	Universal Pipette Tips				Filter Universal Pipette Tips			
	Colour	/Pack	/Case	Cat.No.	Colour	/Pack	/Case	Cat.No.
10	Transparent	96	50	301036	Transparent	96	50	311032
10Extra-long	Transparent	96	50	314406	Transparent	96	50	314416
100	/	/	/	/	Transparent	96	50	316032
200	Transparent	96	50	302136	Transparent	96	50	312032
300	Transparent	96	50	305036	Transparent	/	/	/
1000	Transparent	96	50	303038	Transparent	96	50	313036
1000Extra-long	Transparent	96	50	304036	Transparent	96	50	313032

Note: Low-binding pipette tips must not be autoclaved, as high-temperature sterilization may affect their low-binding performance.

Pipette Tips



Feature

- Standard size: suitable for major pipettes on the market.
- Smooth interior: minimizes residue and ensures accurate pipetting.
- High-quality materials: the imported PP materials is in line with USP Class VI.
- High-quality filter: pure UHMW polyethylene through unique processing technology.
- Super hydrophobicity: hydrophobic filter forms a solid barrier to aerosols, eliminating the risk of cross-contamination between sample and pipette.
- Optimal pore size: ensures smooth aspiration
- Advanced technology: ultra-fine grinding and moulding technique without mould release agent ensures better product quality.
- Innovative design: ensures good flexibility, sealability and compatibility.
- Standard workshop: Class 100,000 cleanroom to ensure the products are free of pyrogen and DNase/RNase.
- Transparency: good transparency make it easy to observe the liquid level during use.
- Resistant to organic solvents: used to pipette various organic solvents.
- Individual labelling: each package has a Cat. NO for quality tracking and traceability.
- Highly efficient sterilization- Larger effective membrane filtration area of 4.9 cm².
- High flow rate and throughput.

Pipette Tip Bulk, Non-Sterile

Volume (μL)	Universal Pipette Tips				Filter Universal Pipette Tips			
	Colour	/Bag	/Case	Cat.No.	Colour	/Bag	/Case	Cat.No.
10	Clear	1000	10000	301006	Clear	1000	10000	311001
10 (Extra-long)	Clear	1000	10000	314021	Clear	1000	10000	314031
20	/	/	/	/	Yellow	1000	10000	310101
50	/	/	/	/	Yellow	1000	10000	315101
100	/	/	/	/	Yellow	1000	10000	316001
200	Yellow	1000	10000	302106	Yellow	1000	10000	312001
300	Clear	1000	10000	305006	/	/	/	/
1000	Blue	1000	5000	303206	Blue	1000	5000	313006
1000 (Extra-long)	Blue	500	5000	304006	Blue	500	5000	313001
1000 (Extra-long) With graduations	Blue	500	5000	304906	Blue	500	5000	313901

Pipette Tip Racked, Sterile

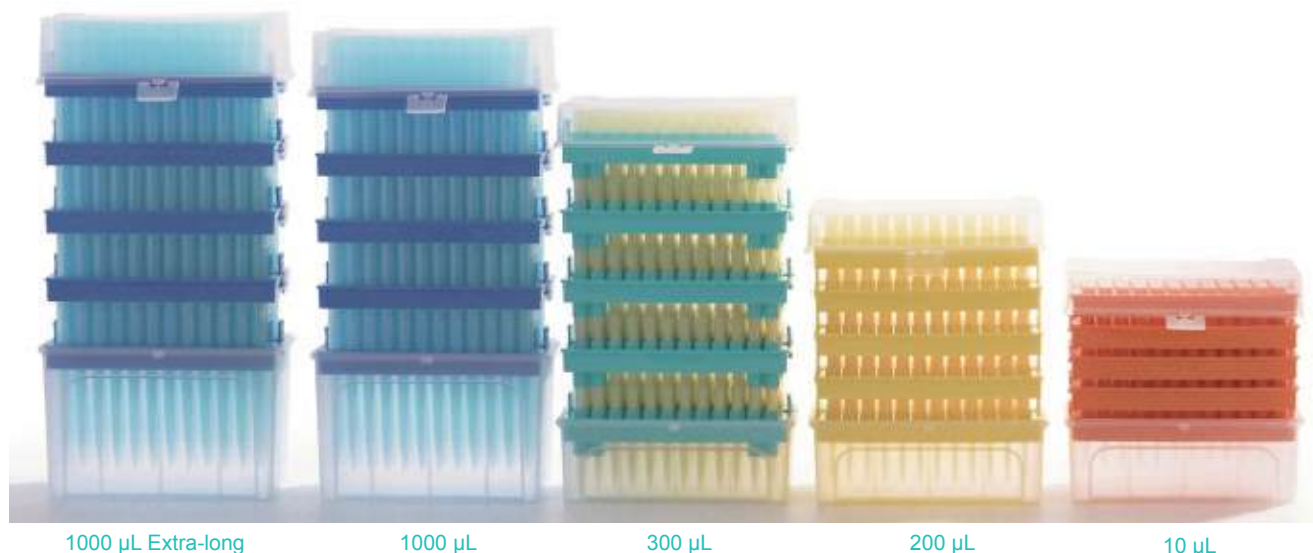
Volume (μL)	Universal Pipette Tips					Filter Universal Pipette Tips				
	Colour	/Rack	/Pack	/Case	Cat.No.	Colour	/Rack	/Pack	/Case	Cat.No.
10	Clear	96	960	4800	301016	Clear	96	960	4800	311012
10 (Extra-long)	Clear	96	960	4800	314026	Clear	96	960	4800	314036
20	/	/	/	/	/	Yellow	96	960	4800	310112
50	/	/	/	/	/	Yellow	96	960	4800	315112
100	/	/	/	/	/	Yellow	96	960	4800	316012
200	Yellow	96	960	4800	302116	Yellow	96	960	4800	312012
300	Clear	96	960	4800	305016	/	/	/	/	/
1000	Blue	100	1000	5000	303216	Blue	96	/	4800	313016
1000 (Extra-long)	Blue	96	960	4800	304016	Blue	96	960	4800	313012
1000 (Extra-long) With graduations	Blue	96	960	4800	304916	Blue	96	960	4800	313912

Tip Box, Box without tips

Volume (μL)		Middle panel holes	Packing	Cat.No.
Universal Tip Box	Filter Tip Box			
10	10	96	50 pcs/cs (Box only)	351001
10 (Extra-long)	10 (Extra-long)	96	50 pcs/cs (Box only)	351601
200	20/50/100	96	50 pcs/cs (Box only)	351101
300	200	96	50 pcs/cs (Box only)	351401
1000	/	100	50 pcs/cs (Box only)	351201
1000 (Extra-long)	1000 (Extra-long) / 1000	96	50 pcs/cs (Box only)	351301



Stackable Tip Refill



NEST Refill Pipette Tips, Bulk are used for quantitative transfer of liquid consumables. They are used in experimental fields with liquid transfer operations, such as in biology and chemistry, and for liquid transfer in cell culture laboratories, liquid addition, liquid suction, or other liquid transfer uses.

Application direction: genomics, proteomics, cytology, immunodetection, metabolomics, biopharmaceutical research and development, and other commonly used high-throughput liquid transfer uses.

Features

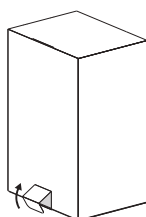
- The stacked tips are assembled by stacking 5-10 different-sized tips into the tip box holder. They are convenient for customers to use, reduce costs, and have a high utilization rate. Only one box bottom is needed, and when one box is used up, another one can be loaded into the box holder.
- Product usage: more convenient than bagged pipette tips and more economical than single-box packaging, improving work efficiency and saving work time.
- Experimental-grade polypropylene (PP) is used for all injection-molded parts of the product.

Volume (µL)	Filter	Sterilization	Fits Empty Tip Boxes	The following empty boxes can also be recycled for tips		Packing	Cat.No.
10	NO	Yes	10 µL (Extra-long) Tip Box(351601)	Universal Pipette Tips, Racked: 10 µL(Extra-long)(314026)	Filter Universal Pipette Tips, Racked: 10 µL(Extra-long)(314036)	96 pcs/rack 5 racks/pack 4800 pcs/case	301081
200	NO	Yes	200 µL Tip Box(351101)	200 µL(302116)	100 µL(316012)		302081
300	NO	Yes	300 µL Tip Box(351401)	300 µL(305016)	200 µL(312012)		305081
1000	NO	Yes	1000 µL (Extra-long) Tip Box (351301)	Universal Pipette Tips, Racked: 1000 µL(Extra-long)(304016)			303081
1000 Extra-long	NO	Yes		Filter Universal Pipette Tips, Racked: 1000 µL(313016) / 1000 µL(Extra-long)(313012)			304081

Instructions for Use

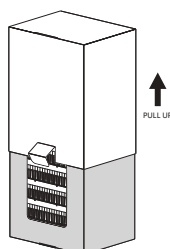
STEP1

Lift the bottom flap of the box upward in the direction of the arrow



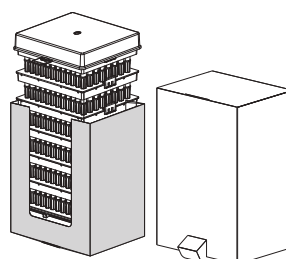
STEP2

Hold the upper part of the box and lift it up



STEP3

Take out the stacked pipette tips



STEP4

Remove the plastic wrapping before use

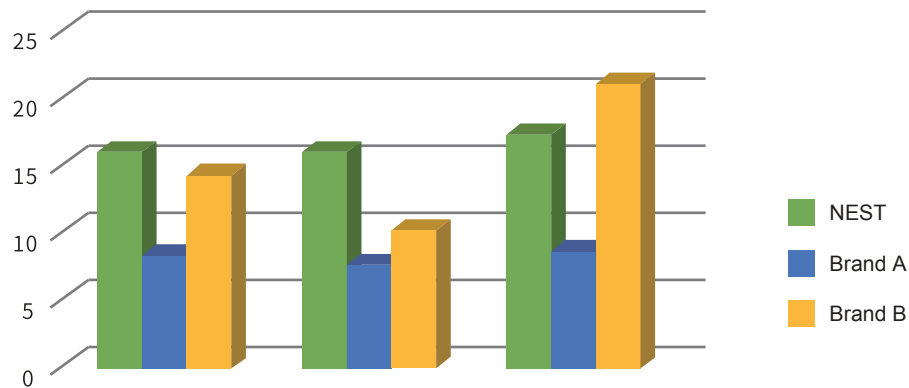


Features

- High flow rates and flux.
- Low protein binding and low chemical extractability.
- Pore size: 0.22 μm .
- Non-Pyrogenic, DNase/RNase free.
- Sterilized by E-beam, SAL=10⁻⁶.
- Individually packaged in sterile bag.
- Endotoxin free, pyrogen free.
- For laboratory use only.
- If the package is damaged, please do not use.

Membrane Type	Hydrophilicity	Features	Application Directions	Cautions
PES	Hydrophilic	Low protein adsorption, high flow rate, wide PH range, high chemical compatibility, good heat resistance.	For general culture media and aqueous solutions, polar or middle-polar solvents, neutral aqueous solutions.	Not applicable for chloroform, esters, amides and strong acids or strong bases.
PVDF	Hydrophilic	Wide practicability, good oxidation resistance and heat resistance.	May be used for aqueous solutions and most solvents, including strong non-polar solvents. Ideal for preparations of HPLC and GC.	Not applicable for strong acids and bases.
MCE	Hydrophilic	Strong chemical compatibility and low protein adsorption, the optimum pH range is 3-6.	Used for particle analysis of general culture media and aqueous solutions. HPLC sample preparation.	The set should not be used for filtration of ethanol and alkaline solutions. The working temperature should not be over 40°C.
CA	Hydrophilic	High flow rate and heat stability as well as very low adsorption, stable within the range of pH 4-8.	It may resist most alcohols and oils, and is suitable for sterling filtration of aqueous solutions, buffers, serum and culture media, as well as filtration of the moving phase of HPLCD.	The CA membrane may accommodate a smaller volume of buffer since it has low hydrophilia.

Comparison of the flow rate of different brands of vacuum filters



	DMEM+10%FBs	RPMI1640+10%FBs	TSB
NEST	16	16	17.39
Brand A	8.33	7.69	8.7
Brand B	14.29	10.26	21.1

Vacuum Filtration System

Volume (mL)	Pore Density (µm)	Vacuum Filtration Systems (Sterile) 1/Pack, 12/Case		Bottle Top Vacuum Filter (Sterile) 1/Pack, 24/Case	
		PES Membrane	PVDF Membrane	PES Membrane	PVDF Membrane
50	0.10	347002	347102	347012	347112
	0.22	347001	347101	347011	347111
	0.45	347003	347103	347013	347113
150	0.10	346002	346102	346012	346112
	0.22	346001	346101	346011	346111
	0.45	346003	346103	346013	346113
250	0.10	342002	342102	342012	342112
	0.22	342001	342101	342011	342111
	0.45	342003	342103	342013	342113
500	0.10	343002	343102	343012	343112
	0.22	343001	343101	343011	343111
	0.45	343003	343103	343013	343113
1000	0.10	344002	344102	344012	344112
	0.22	344001	344101	344011	344111
	0.45	344003	344103	344013	344113

Polystyrene Storage Bottles (Sterile)

Volume (mL)	Size (mm)			Packing		Cat.No.
	Height	Bottleneck Diameter	Bottom Diameter	/Pack	/Case	
150	80	42	89.15	1	24	346021
250	105		88	1	24	342021
500	145		96	1	24	343021
1000	178.5		122	1	12	344021

Warning

- Do not use plastic bottles, glass bottles, flasks or containers that are not designed for filtration and cannot withstand negative pressure to connect to the upper cup.
- Not suitable for culture flasks larger than 2L.
- Working temperature: 4-37°C.
- Working pressure: 0.03-0.06Mpa, if there is foam, please reduce pressure appropriately.
- Tighten the upper cup and bottle mouth by hand, but do not overtighten.
- Personal protective equipment must be used at all times, and goggles must be worn when using vacuum equipment.
- Work on the aseptic operating table.
- It is not recommended to recycle any hazardous substances, hazardous substances, wastes or biochemically hazardous materials.
- PES, PVDF, and CA membranes are not compatible with acetonitrile (ACN).

Adaptor for Vacuum Filtration System

Introduction

NEST Adaptor for Vacuum Filtration System is designed to seamlessly connect the upper cup and the lower container with a 38mm mouth. This meets the filtration needs of customers who use containers of this size.

Features

- It makes a 38mm lower container a viable alternative to the regular one with 45mm mouth for filtration, thus minimizing the risk of contamination during liquid transfer.
- Validated by the Sealing Performance Test, ensuring no leakage even with the additional adaptor.

Descriptions	Packaging	Cat.No.
Adaptor for Vacuum Filtration System	1 pc/pk, 10 pks/cs	334591



Precautions: It is important to use a lower container that is rigid and has thick walls, because thin-walled containers run a certain risk of depression during negative pressure filtration.

Syringe Filter

Syringe filters are used in fields like life sciences, pharmaceuticals, environment, biotechnology, food and beverages, agricultural testing laboratories, etc. In particular, they are widely used in life science laboratories to sterilize samples of small volume, such as proteins, additives, buffers, reagents and drugs. The one-piece injection molded package of syringe filters is made of medical polypropylene, which is resistant to high pressure and product leakage.

Features

- Highly efficient sterilization
- Larger effective membrane filtration area of 4.9 cm².
- High flow rate and throughput.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.



Size (mm)	Pore Size (μm)	Membrane	/Pack	/Case	Cat. No.
30	0.22	PES	1	100	331011
30	0.22	PVDF	1	100	331001
25	0.22	PES	1	100	331111
13	0.22	PES	1	100	331211



Size (mm)	Pore Size (μm)	Membrane	/Pack	/Case	Cat. No.
30	0.45	Nylon	1	100	331321
25	0.45	Nylon	1	100	331121
13	0.45	Nylon	1	100	331221

Precautions

- When handling chromatography samples, avoid introducing other impurities during the filtration process.
- Do not use a syringe with a volume less than 10 mL, which may cause excessive pressure in the injection tube thus resulting in membrane damage or personal injury.
- Single use only.
- Discard the initial few filtrates, of which the volume is about the volume of the filter.

Microcentrifuge Tube



Rounded bottom without tip



Special safe-lock cap



Clear graduations



Frosted marking area



5.0mL 2.0mL 1.5mL 0.6mL 1.5mL 0.6mL

- USP VI grade polypropylene material, free from heavy metal.
- Sterilized by E-beam, SAL=10⁻⁶.
- RNase free, endotoxin level less than 0.1EU.
- Each package is individually labelled with a Cat.NO for easy quality tracking and traceability.
- Brown colour provides protection from light, especially for light-sensitive substances.
- RCF: 30,000 xg.
- Autoclavable at 121°C/15psi

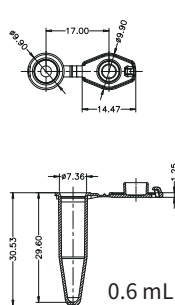
Volume (mL)	Bottom	Color	Sterile	/Pack	/Bag	/Case	Cat.No.
0.6	Conical	Clear	Non-sterile	1000	/	10000	605001
		Clear	Sterile	50	750	7500	605601
		Amber, Opaque	Sterile	50	750	7500	605401
		Amber, Opaque	Non-sterile	1000	/	10000	605501
1.5	Conical	Clear	Non-sterile	500	/	5000	615001
		Clear	Sterile	50	400	4000	615601
		Amber, Opaque	Sterile	50	400	4000	615401
2.0	Round	Clear	Non-sterile	500	/	5000	620011
		Clear	Sterile	50	400	4000	620611
5.0	Round	Clear	Non-sterile	200	200	2000	603011
		Clear	Sterile	200	200	2000	603111

Micro Tube Box

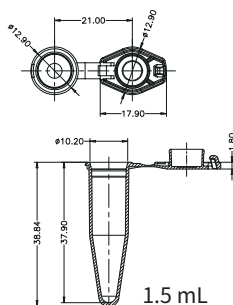


- Withstand temperature ranging from -80 °C to 121 °C.
- Solid polypropylene base and polycarbonate cover.
- Non-sterile.

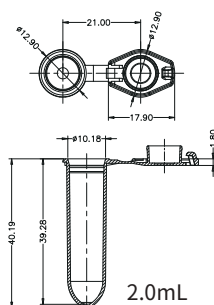
Application (mL)	Spec (well)	/Pack	/Case	Cat.No.
0.6	10*10	1	40	613001
1.5/2	8*8	1	40	613111



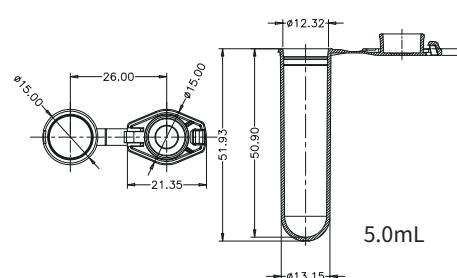
0.6 mL



1.5 mL



2.0mL



5.0mL

Centrifuge Tube



PS Rack



Bulk



Centrifuge Tube Rack

Features

- Printed Graduations (with marking area).
- Polypropylene tube and high-density polyethylene cap.
- Flat markable cap with leakproof seal.
- One-hand operation design for the caps is easy to handle.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.

Premium Level

- Up to the standards of biological analysis.
- High strength non-toxic materials.
- Raw material comply with USP VI complies.

Centrifuge Tube Rack

- Made of virgin polypropylene.
- Reusable and economic.
- Non-sterilized.

Application	/Case	Cat.No.
For 15 mL Tubes	50	610001
For 50 mL Tubes	50	610101

Volume (mL)	Color	Packaging	Max.RCF(xg)	Sterile	Packing		Cat.No.	
					/Pack	/Case	Premium Level	Standard Level
5	Clear	Bulk	21000	Yes	100	100	603402	/
15	Clear	PS Rack	12000		50	500	601001	601051
	Clear	Bulk	12000		50	500	601002	601052
	Amber, Translucent	PS Rack	12000		50	500	601601	/
	Amber, Translucent	Bulk	12000		50	500	601602	/
	Amber, Opaque	PS Rack	12000		50	500	601201	/
	Amber, Opaque	Bulk	12000		50	500	601202	/
50	Clear	PS Rack	12000		25	500	602001	602051
	Clear	Bulk	12000		25	500	602002	602052
	Amber, Translucent	PS Rack	12000		25	500	602601	/
	Amber, Translucent	Bulk	12000		25	500	602602	/
	Amber, Opaque	PS Rack	12000		25	500	602201	/
	Amber, Opaque	Bulk	12000		25	500	602202	/
50(Self-Standing)	Clear	Bulk	5000		25	500	/	602072

Reinforced Centrifuge Tube



High-performance centrifuge tubes are professional-grade consumables developed by NEST for applications requiring high centrifugal force, superior sealing, and enhanced sample safety. They are suitable for scenarios where structural stability, sealing reliability, and experimental consistency exceed those of standard centrifuge tubes.

The product features an integrated design that ensures a stable and reliable sealing system. It is widely used in demanding applications such as virus purification, exosome isolation, subcellular fractionation, plasmid preparation, and next-generation sequencing (NGS) library preparation, making it an essential consumable in molecular biology, cell biology, and biopharmaceutical research.

Product Application

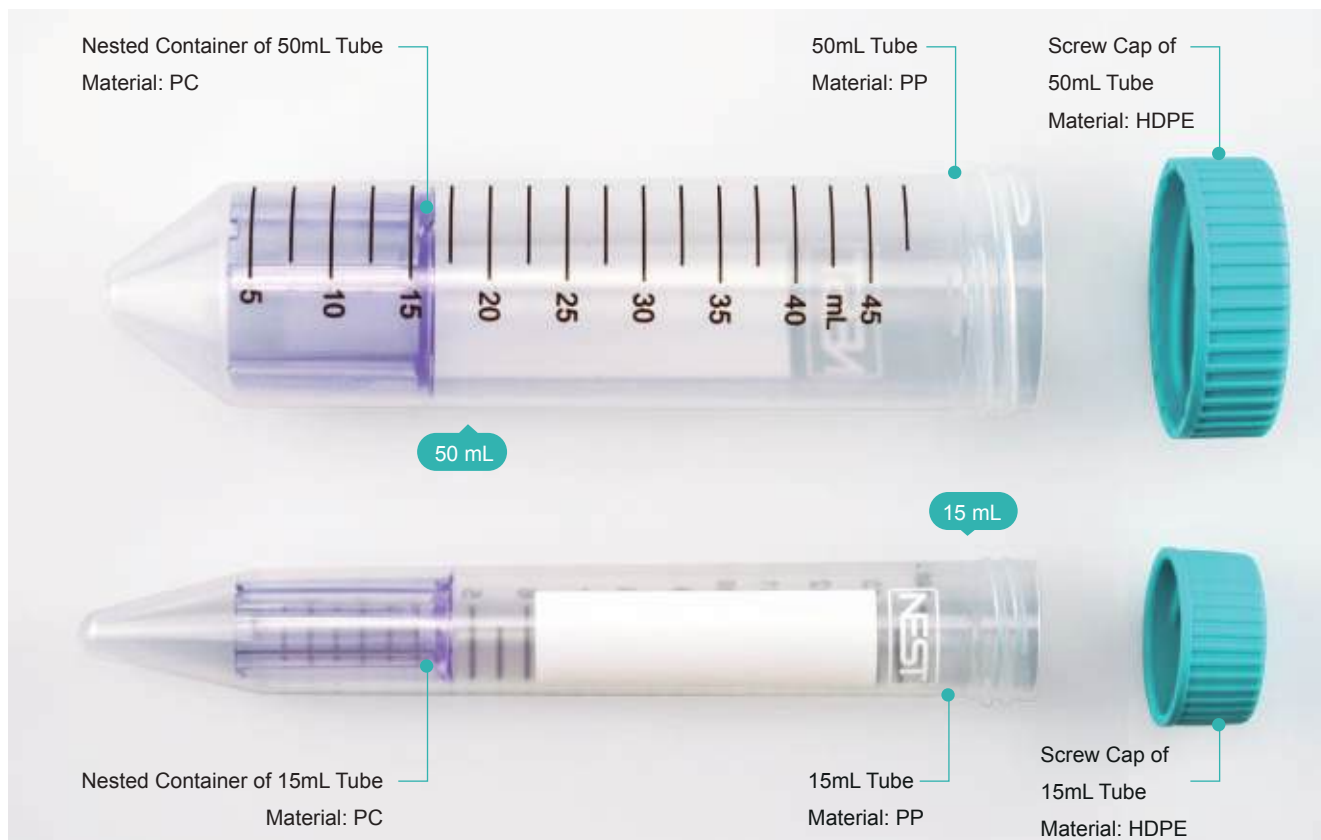
- Frontier life science research, biopharmaceutical process development, precision analysis in CRO/CDMO settings, and the preparation of cell and gene therapy products.
- Virus purification and concentration; exosome isolation and enrichment; protein complex extraction and precipitation; nucleic acid (DNA/RNA) extraction and precipitation; cell and microbial sample pelleting and collection; subcellular fractionation and organelle isolation; high-speed centrifugation and clarification of bioprocess samples
- Sample concentration and sealed storage under vacuum conditions

Features

- Compliant with FDA Class VI standards
- Reinforced tube design, withstands centrifugation up to 18,000 xg
- Integrated cap and sealing design for reliable sealing performance
- Withstands vacuum up to -95 kPa
- Suitable for storage at -80°C
- Transparent tube with maximum fill line for freezing and maximum centrifugation marking
- Endotoxin-free and non-cytotoxic
- Electron beam sterilized, SAL = 10^{-6}

Volume (mL)	Color	Packaging	Max.RCF(xg)	Sterile	Packing		Cat.No.
					/Pack	/Case	
NEW 50	Clear	Bulk	18000	Yes	25	500	602702

Peripheral Blood Lymphocyte Separation Tube



This product separates and purifies cells with separation solution by means of density gradient centrifugation according to the difference in cell density. With the density gradients generated inside, the target cells can be retained on top of the nested container in the tube, which is designed specifically to separate the target sample from the density gradient medium to the utmost extent; while erythrocytes and granulocytes will sink at the bottom after centrifugation, and the PBMC (Peripheral Blood Mononuclear Cell, including lymphocytes and monocytes, etc.) will float on the surface. Only the simple operation of decanting is involved in the final stage, and no other professionally technical operations required.

Features

- Rapid separation and purification for PBMC within only 15 min.
- Simple operation procedures: no need to slowly and laboriously add samples into the solution; when collecting samples, simply decant the centrifuge tube. No other professionally technical operations are required.
- Good reproducibility for reduced errors and less operation variation among users.
- E-beam sterilized with SAL=10⁻⁶.
- Pyrogen free, nucleases free.

Usages and Application Directions

Peripheral Blood Lymphocyte Separation Tube is mainly applied to separate Peripheral Blood Mononuclear Cell (lymphocytes and monocytes) from whole blood or bone marrow through density gradient centrifugation. For research use only.

Volume (mL)	Capacity(mL)	Sterile	/Pack	/Case	Cat.No.
15	4-9	Yes	50	10	601852
			25	6	601851
50	13-30		25	20	602852
			10	10	602851

250/500 mL Centrifuge Tube



250 / 500 mL



Racked

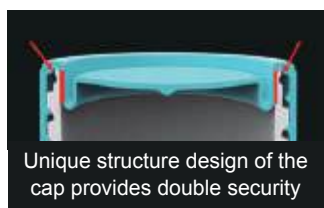


Bulk

The 250 mL & 500 mL centrifuge tubes can process a large number of samples at one time and are suitable for the separation and harvest of large amounts of cells, supernatants, bacteria, yeast and tissue samples. Therefore, they are widely used in the field of life sciences and clinical.

Application

- Separation of sediments after chemical reactions for harvest and application.
- Harvest of biomacromolecules, inorganics and organics.
- In biochemistry and other biological fields, usually used to centrifuge and collect a large volume of cells, biomacromolecules and supernatants.



Unique structure design of the cap provides double security



Newly added o-ring



Increased the thickness of conical bottom

Features

- Unique structure design of the cap provides double security, further improving the tight seal ability.
- Increased the thickness of conical bottom in order to improve the maximum centrifugal limit.
- Polypropylene tube and high density polyethylene cap.
- Max. centrifugal limit 7000xg.
- Temperature range: -80 °C~120 °C.
- Clear scale.
- DNase, RNase and pyrogen free.
- E-beam sterilization, SAL=10⁻⁶.
- Separation of sediments after chemical reactions for harvest and application.
- Harvest of biomacromolecules, inorganics and organics.
- In biochemistry and other biological fields, usually used to centrifuge and collect a large volume of cells, biomacromolecules and supernatants.

Packaging	Sterile	Volume (mL)	/Pack	/Case	Cat.No.
Bulk	Yes	250	6	60	622001
Bulk	Yes	500	6	36	623001
Racked	Yes	250	6	24	622002
Racked	Yes	500	4	24	623002

Cluster tube

NEST 1.1mL 96-well Cluster Tube Box conforms to the ANSI-SBS standard and is compatible with multi-channel pipettes and automated liquid workstations. The raw material of tube body is imported PP, which meets the USP-CLASS 6 standard. It has high transparency and good chemical stability, and is suitable for low-temperature storage of cells, drugs, tissues, sera, and other reagents.



Complete Specifications

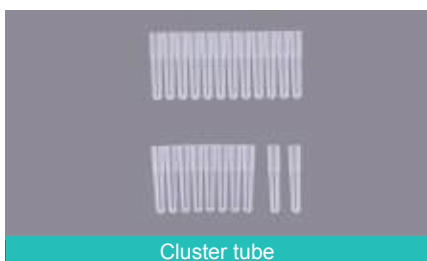
- NEST 1.1mL Cluster Tubes are available in single tube, 8-strip, and 12-strip, and the tube caps are available in 8-strip and 12-strip for customers to choose from.
- They are compatible with multi-channel pipettes and automated liquid workstations with SBS standard size carriers.

Exquisite Design

- The one-way cap design, with letter and number grids, ensures positive identification of samples.
- The bottom and side walls of the box holder are hollowed out for good thermal conductivity, and the box supports direct immersion in a water bath.

High Quality Raw Materials

- The raw material is imported PP, which conforms to USP class 6 standards. The 8-strip and 12-strip caps are made of TPE, which has better sealing performance.
- Resistant to low temperature storage at -80 °C, and autoclavable.



Cluster tube



Boxed Cluster Tube



Bagged Cluster Tube Cap

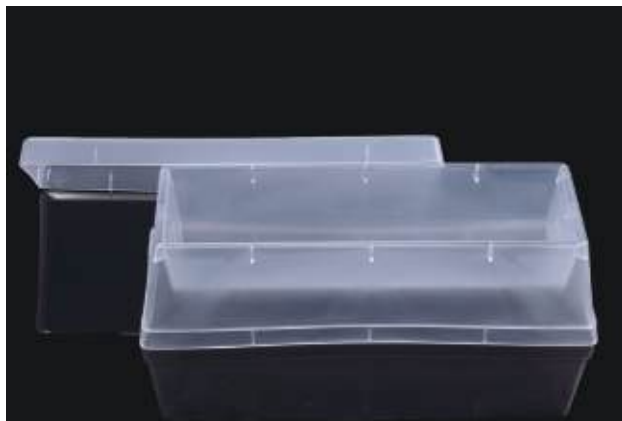
Cluster Tube

Schematic Diagram	Name	Packaging			Material	Sterile Cat.No.	Non-sterile Cat.No.
	1.1mL Single Cluster Tube	Bagged	960 pcs/bag	5 bags/case	PP	/	628111
		Boxed	96 pcs/box 10 boxes/pack	5 bags/case	PP	628114	628112
	1.1mL 8-strip Cluster Tube	Bagged	120 pcs/bag	5 bags/case	PP	/	628121
		Boxed	12 pcs/box 10 boxes/pack	5 bags/case	PP	628124	628122
	1.1mL 12-strip Cluster Tube	Bagged	80 pcs/bag	5 bags/case	PP	/	628131
		Boxed	8 pcs/box 10 boxes/pack	5 bags/case	PP	628134	628132

Cluster Tube Cap

Schematic Diagram	Name	Packaging			Material	Sterile Cat.No.	Non-sterile Cat.No.
	8-strip Cluster Tube Cap	Bagged	120/bag	600/case	TPE	628923	628921
	12-strip Cluster Tube Cap	Bagged	80/bag	400/case	TPE	628933	628931

Reagent Reservoir



Features

- Made of USP Class VI compliant polypropylene.
- The V shape bottom is compatible with single or multi-channel pipettes during cell culture, immunoassays, etc.
- A large capacity of 60 ml; injection-moulded with scale lines
- Individually labelled with the Cat.NO for easy quality tracking and traceability.
- Non-Pyrogenic, DNase/Rnase free.

Volume (mL)	Sterile	Cap	/Pack	/Case	Cat.No.
60	No	Yes	5	25	360002
60	Yes	Yes	5	25	360012

Reservoir



8 Channel



8 Channel



12 Channel



12 Channel



96 Channel



384 Channel

Features

- Perfectly overcomes the surface tension of liquids during automated pipetting and minimizes liquid residues.
- Made of USP Class VI compliant polypropylene, and is chemically stable and resistant to chemical corrosion.
- Freezable down to -80° C
- Less residue and wall hangings
- Conforms to ANSI (American National Standards Institute) SBS standards.
- Each package is individually labelled with the batch number for easy quality tracking and traceability.
- Non-Pyrogenic, DNase/Rnase free. Low heavy metal content.
- Sterilized by E-beam, SAL=10⁻⁶.

Channel Troughs	Channel	Skirt	Volume (mL)	/Pack	/Case	Cat.No.	
						Non-sterile	Sterile
8	Multi Well	Medium Profile	22	5	50	360101	360111
	Multi Well	High Profile	32	5	50	360201	360261
	Single Well	High Profile	290	5	50	360205	360265
12	Multi Well	Medium Profile	15	5	50	360102	360112
	Multi Well	High Profile	22	5	50	360202	360262
	Single Well	High Profile	290	5	50	360206	360266
96	Single Well	Medium Profile	195	5	50	360103	360113
	Single Well	High Profile	290	5	50	360203	360263
384	Single Well	Medium Profile	195	5	50	360104	360114
	Single Well	High Profile	290	5	50	360204	360264

Pasteur Pipette

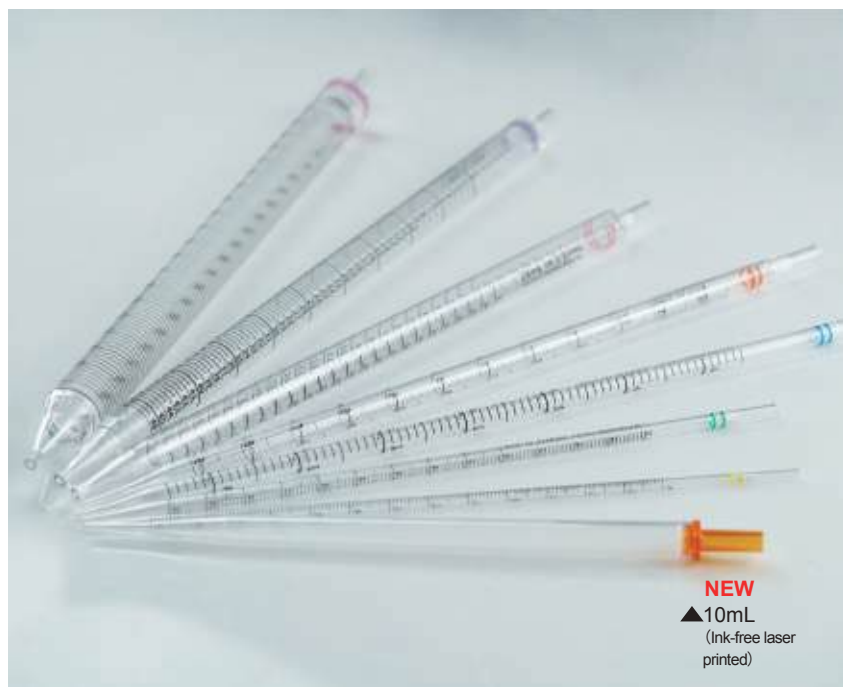


Features

- Good chemical stability.
- Transparent with clear graduations for easy observation.
- Pipette can be twisted for use with micro vessels and special-shaped containers.
- Good resilience for rapid liquid transfer
- High precision and good repeatability.
- Each package is individually labelled with the batch number for easy quality tracking and traceability.
- DNase/RNase, endotoxin and pyrogenic free.
- Individually wrapped, sterilized by EO, SAL=10⁻⁶.

Graduated Volume (mL)	Maximum Volume (mL)	Length (mm)	Packaging	Sterile	/Pack	/Case	Cat.No.
1	5.8	145	Individually Packed	Sterile	500	2000	318012
			Bulk	Non-sterile	500	5000	318031
2	4.8	155	Individually Packed	Sterile	500	2000	318112
			Bulk	Non-sterile	500	5000	318131
3	7.0	155	Individually Packed	Sterile	500	2000	318212
			Bulk	Non-sterile	500	5000	318231
	8.3	180 (Extra Long)	Individually Packed	Sterile	200	2000	318314
5	11.7	200	Individually Packed	Sterile	250	1000	318516
10	23.7	285	Individually Packed	Sterile	125	500	318417

Serological Pipette



Individually Plastic-plastic Wrapped



Individually Paper-plastic Wrapped

NEST serological pipettes can be used in biological research such as tissue culture and bacterial culture. They are made of highly transparent polystyrene and are individually packaged in paper-plastic bags. Pipettes of different specifications are distinguished by different colors.

Features

- Edged color-coded band for identification.
- Made of high clarity, 100% virgin polystyrene.
- Negative graduations for extra volume.
- Polyolefin fiber filter to reduce contamination.
- Each package is individually labelled with the batch number for easy quality tracking and traceability.
- Non-Pyrogenic, DNase/Rnase free.
- Sterilized by E-beam, SAL=10⁻⁶.

Volume (mL)	Sterile	/Pack	/Case	Individually Plastic-plastic Wrapped	Individually Paper-plastic Wrapped
1	Yes	100	500	324003	324001
2	Yes	100	400	325003	325001
5	Yes	100	200	326003	326001
10	Yes	100	200	327003	327001
10 (Ink-free laser printed)	Yes	50	500	327303	/
25	Yes	50	200	328003	328001
50	Yes	50	100	329003	329001
100	Yes	25	50	/	329501
2	Yes	10(Double-layer Packaging)	400	/	325004
5	Yes	10(Double-layer Packaging)	200	/	327004
25	Yes	10(Double-layer Packaging)	200	/	328004
50	Yes	10(Double-layer Packaging)	100	/	329004

Round Storage Bottle



Round Storage Bottle is sterile and made from enzyme-free plastic in line with product packaging and storage requirements in molecular biology and cell biology, laboratory medicine, genomics and proteomics, etc. Improvement in the quality of product packaging helps to improve the company image and brand value, make our products' packaging comply with international standards and enter the international market.

Features

- The raw materials, premium polypropylene (PP)/polyethylene (HDPE), are excellent in physical and chemical index and resistant to pressure, impact and acid-base.
- A full range of choices to meet different packaging and storage requirements.
- The properties of wash-free and ready to use mean no need for tedious pro-cleaning processing work. The internal packaging is thickened to ensure transportation and storage safety.
- The professional leak-proof design of bottle mouth guarantees excellent seal ability and exempts the need for inner cover or inner gasket for protection.
- 100% leaking-proof guarantee ensures safety even during air transportation; wide-mouthed design makes it easy to access liquid inside.
- No biotoxicity, pyrogen-free, DNase/RNase-free, manufactured in Class 100,000 clean workshop. The plastic bottles are sterilized using by GAMMA-ray.
- Introduction of imported digital-controlled production equipment with high precision. The products are fine in details and comfortable to hold, with high uniformity among batches. The walls have high gloss but no color difference.
- High-class molding technologies and surface processing technologies produce smooth interior and exterior surfaces of the plastic bottles without wicking effect of reagents during the process, subsequently significantly reducing sample wastage. With paralleled quality, our products can perfectly replace the imported competitors.
- PP material temperature range: 121 °C ~ -20 °C
- HDPE material temperature range: 60 °C ~ -80 °C

Application

- NEST Round Storage Bottle is designed for liquid storage in molecular and cellular biology, laboratory medicine, genomics and proteomics research.

Volume (mL)	Colour	Packing		HDPE		PP	
		/Pack	/Case	Wide-mouth	Narrow-mouth	Wide-mouth	Narrow-mouth
8	Natural White	20	400	/	335101	/	335401
	Amber	20	400	/	335301	/	335201
15	Natural White	20	400	/	336101	/	336401
	Amber	20	400	/	336301	/	336201
30	Natural White	10	200	337101	337103	337401	337403
	Amber	10	200	337301	337303	337201	337203
60	Natural White	10	200	338101	338103	338401	338403
	Amber	10	200	338301	338303	338201	338203
125	Natural White	10	100	339101	339103	339401	339403
	Amber	10	100	339301	339303	339201	339203
250	Natural White	10	100	340101	340103	340401	340403
	Amber	10	100	340301	340303	340201	340203
500	Natural White	5	50	341101	341103	341401	341403
	Amber	5	50	341301	341303	341201	341203
1000	Natural White	5	50	334101	334103	334401	334403
	Amber	5	50	334301	334303	334201	334203

Screw Cap Microcentrifuge Tubes

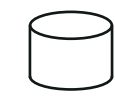


Application

- Caps have 6 color Caps (blue, red, yellow, purple and natural) personalize the identification of different reagents in a fast and convenient way.
- Cap color is encoded in the product code.
- Products are made of transparent polypropylene (PP) which meets USP Class VI standards and is free of heavy metal ions. Products can be used in proteomics, drug development, genomics and other fields.
- Special knurling design on the vial body enables the vial to be stuck in the special base and to be tightened with a single hand.
- Silicone O-ring inside the screw caps ensures secure sealing. ADR & IATA compliant, no liquid leakage in negative pressure test under a pressure of -0.95 bar.
- Withstands a maximum centrifugal force up to 20,000 xg.



Available
in 6 colors



External
Thread Cap
with raised edge



External Thread Cap
Hinged Cap
with raised edge

Sample Vial

Volume (mL)	Packing		Bottom	Cat.No.
	/Pack	/Case		
0.5	500	2000	Self Standing	633901
1.5	500	2000	Self Standing	634901
1.5	500	2000	Conical	634911
2.0	500	2000	Self Standing	635901

Sample Vial Cap

Color	Packing		External Thread Cap with raised edge	External Thread Cap Hinged Cap with raised edge	Flat Cap
	/Pack	/Case			
Blue	500	2000	633951B	633961B	633981B
Red	500	2000	633951R	633961R	633981R
Yellow	500	2000	633951Y	633961Y	633981Y
Purple	500	2000	633951P	633961P	633981P
Natural	500	2000	633951N	633961N	633981N
Green	500	2000	633951G	633961G	633981G



ELISA Plate

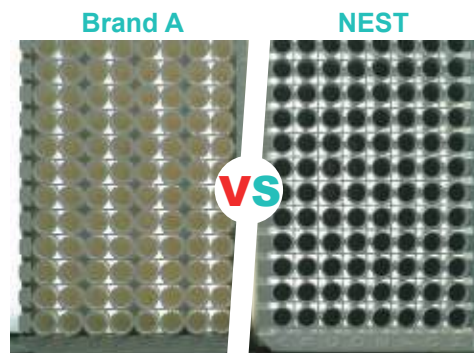
NEST ELISA plate, made of polystyrene, is a safe, reliable and effective supporter in enzyme-linked immuno-absorbent assay (ELISA).

The features of the plates are crucial for the adsorption of antigens, antibodies and antigen-antibody complexes.

ELISA plates from NEST adopts a unique surface treatment process, allowing to obtain ideal results in ELISA tests which are extensively employed in vitro diagnostics in medical and clinical laboratories.

Features

- The plates are made of polystyrene and are designed specifically for ELISAs. They present good adsorption performance and low baseline value.
- Uniform thickness and size.
- High batch-to-batch stability and low coefficient of variation (CV) value.
- Both detachable and non-detachable flat-bottom plates are offered for customers to choose from based on their applications.
- The letters and numbers on the frame of the plates are convenient for detection and identification in experiments.
- High transparency of clear plate bottom.
- White plates are best suited for luminescence measurements as they reflect the signal instead of absorbing it and hence enhance the luminescence signals. Raw materials show good light-proof properties, which greatly reduce well-to-well signal interference.



White Elisa Plates is light-proof, and can lower the cross-talk between wells

Features of detachable 96-well ELISA plate

- Greatly improves the flexibility in diagnostic testing.
- Each well is locked in the frame, all at the same horizontal.
- The design of 8-well strip allows for uniform reading and washing.



Cat.No.	514201	504201	504271	504261	514101
Specification	F96	12 x F8	12 x F8	12 x F8	F96
Color	Transparent	White Frame & Clear Well	White Frame & White Well	White Frame & Black Well	Black
Description	Undetachable	Detachable	Detachable	Detachable	Undetachable
Packing	5/Pack 50/Case	5/Pack 50/Case	5/Pack 50/Case	5/Pack 50/Case	5/Pack 50/Case
Features	High transparency		White Elisa Plates is light-proof, and can lower the cross-talk between wells		Made of non-autofluorescent materials with good protein adsorption and low background fluorescence.
Application	Quantitative and qualitative solid phase immunoassay and binding assay		Autofluorescence, chemiluminescence		Fluorescence immunoassay and binding assay

Deep Well Plate



The length and width of the deep well plate comply with the SBS international standards. The deep well plates of NEST have a variety of specifications, conforming to the needs of fully automatic workstations and experiments.

Features

- High quality imported PP material employed for high stability and no chemical reactions with test reagents.
- Compatible with DMSO and inert to water.
- Can be stored under subzero temperature from -40 to -80 °C .
- Maximum sustainable centrifuge force 4000g.
- Autoclavable at 20Psi, 121 °C for 20 minutes, great heating uniformity.
- Minimum residual liquid, low heavy metal content.
- Certified DNase/RNase and Pyrogen Free.
- Conformed to international SBS Standards.
- Good flat and can be transported for long distance if sealed by heat sealable film.
- Produced and packed in Class 100,000 clean workshop.
- Alphabetical sorting and corner cut marking for convenient tracking of samples.
- Each package has a separate article number/batch number identification, facilitating the quality tracking.

Application

Genomic DNA extraction, plasmid DNA extraction, and purification of various samples. High-throughput automatic liquid operation to achieve high-throughput operations, such as protein precipitation, liquid extraction, and processing of animal tissues, bacteria, plants, soil, clinical samples, yeasts, etc.



504102



501101, 501601



502162



503102, 503162



507001, 507101

Round Well

Specification	Volume (mL)	Bottom	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
48-Round well	3.5	U-Bottom	10	50	504102	504162
96-Round well	0.36	V-Bottom	10	50	500101	500161
	0.4	U-Bottom	10	50	501102	501162
	0.5	V-Bottom	10	50	501101	501601
	1	U-Bottom	5	50	502102	502162
	2	U-Bottom	5	50	503102	503162
	1.3	U-Bottom	5	50	507001	507101

Plastic Tip Comb

Specification	Bottom	/Bag	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
8 Tip Combs	U-Bottom	2	25	50	509211	509261
8 Tip Combs	V-Bottom	1	/	25	/	509001
MagPure 96 Tip Combs	V-Bottom	5	/	50	503311	503361

503361, 503311 Compatible with KingFisher Flex&Presto



509211, 509261



509001, 510011, 510001



503361, 503311



501002、501062



503001、503501



503002、503062



503021、503621



504002、504062



503711、503761



500021、500621



502002



Silicone Sealing Mat

Square Well

Specification	Volume (mL)	Bottom	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
24 Square Well	10.4	V-Bottom	5	10	504301	/
	10.4	U-Bottom	5	10	/	504362
	16	V-Bottom	1	25	/	510001
24 Square Well with 24 Well Plastic Comb	16	V-Bottom	1	25	510071	510011
48 Square Well	4.6	U-Bottom	5	50	504062	504002
96 Square Well	0.5	V-Bottom	5	50	500021	500621
	1	U-Bottom	10	50	501002	501062
	1.6	U-Bottom	5	50	502002	502062
	2	V-Bottom	5	50	503001	503501
	2.2	U-Bottom	5	50	503002	503062
	2.2	V-Bottom	5	50	503021	503621
96 I Shape Square Wells	2.2	U-Bottom	5	50	503711	503761

500021、500621、503021、503621 Compatible with King Fisher Flex&Presto

Silicone Sealing Mat

Compatibility	Volume	Piercibility	/Pack	/Case	Cat.No.
96 Well Round well	≤ 1.0 mL	Can been punctured	10	50	506005
	2.0 mL	Can been punctured	10	50	506006
96 Well Square well	0.5-2.2mL	/	10	50	506003
		Can been punctured	10	50	506004

8-Strip PCR Tube & Tube & Cap



PCR Tube

Volume (mL)	Cap Type	Color	/Pack	/Case	Cat.No.
0.2	Flat	Transparent	500	10000	401001

Features

- Made of polypropylene.
- Compatible with all major PCR and real-time PCR instruments on the market. Thin-wall design produces high thermal conductivity, allowing the reaction solution inside to reach the target temperature as quickly as possible.
- The cap has excellent sealing performance and is easy to open; the loss of reaction volume can be controlled within 5% when a pcr heated lid is applied.
- A maximum capacity of 250 μ L.
- No human DNA, DNase/RNase free, no PCR inhibitors.
- Zip-lock bag.

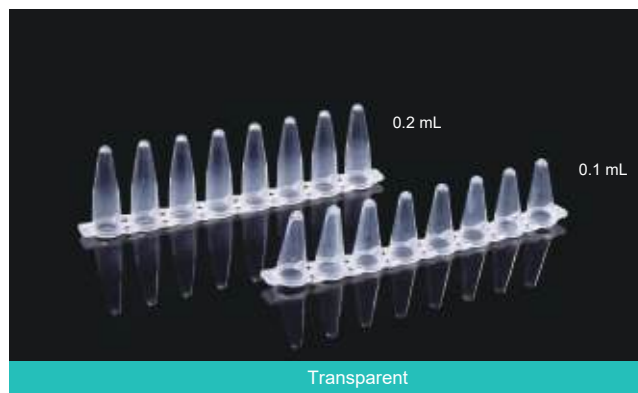
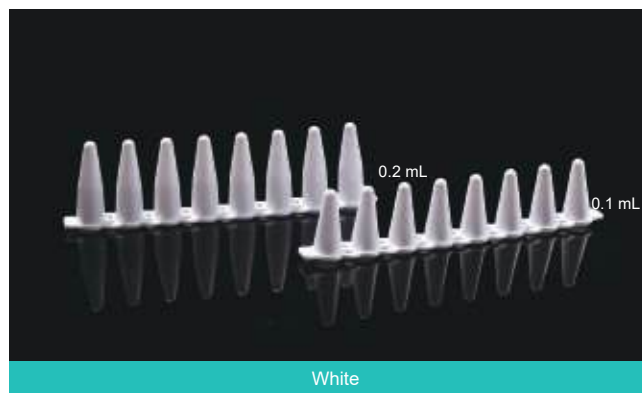
PCR 8-strip Tube with Individual Cap Attached

Volume (mL)	Cap Type	Color	/Pack	/Case	Cat.No.
0.2	Flat	Transparent	12	1200	404001

Features

- No human DNA, no DNase/RNase, no PCR inhibitors.
- Zip-lock bag.
- White PCR 8-strip tubes can effectively prevent signal interference, increase signal strength, and improve experimental efficiency.

PCR 8-strip Tube



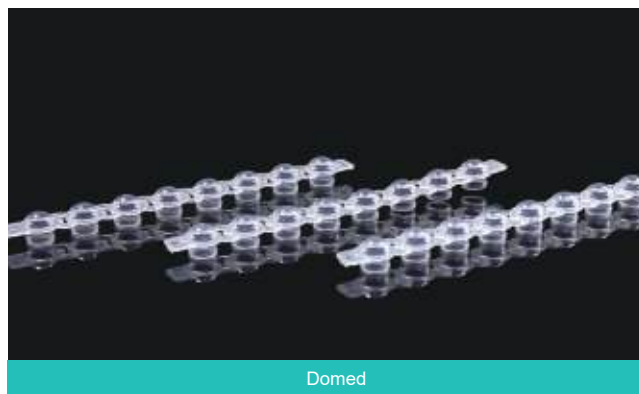
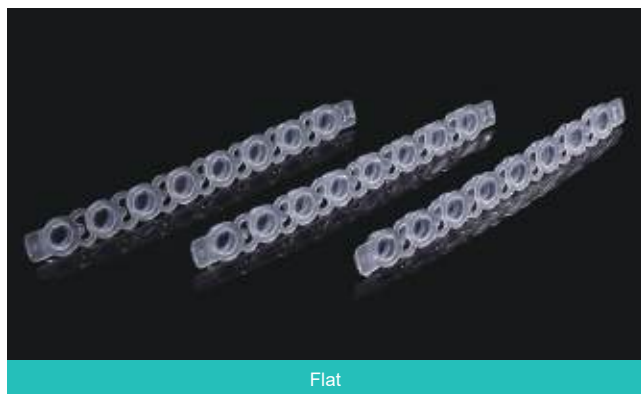
Volume (mL)	Color	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
0.1	Transparent	125	1250	403102	403122
	White	125	1250	403112	403132
0.2	Transparent	125	1250	403002	403022
	White	125	1250	403012	403032

The transparent version is suitable for ordinary PCR reactions, and the white version is suitable for qPCR reactions.

The 0.1 mL tube is intended for overnight incubation experiments. It is specifically designed to be shorter than standard tubes to reduce contamination caused by condensation and the evaporation of the reaction solution. The design also increases the penetration intensity of fluorescent signals in qPCR.

The maximum capacity of the 0.1 mL tube is 150 μ L, and that of a 0.2 mL tube is 250 μ L.

8-Well PCR Tube Strip Caps



Cap Type	Color	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
Flat	Transparent	125	1250	406012	406022
Domed	Transparent	125	1250	406112	406122

- Compatible with NEST 8-strip PCR Tubes or 96-well PCR plates.
- The cap design allows for easy opening and closing, securing better sealing performance.
- The flat caps are better for qPCR experiments.
- The domed cap can better prevent liquid evaporation.

PCR 96 Well Plate

When using a thermal cycler with the fluorescence detector above the samples, NEST white PCR plates effectively reduce mutual interference between wells. The Nest white PCR plate also allows for high accuracy of detection when signal intensity is low, while Nest clear PCR plates are designed for PCR machines where the fluorescence detector is located below the sample plate.

Features

- Made of high-quality polypropylene to ensure minimal loss of reaction solution.
- Flat surface, thick and solid, not easy to deform.
- The black ink-printing marks on the surface are easy to read and identify.
- Elevated edge of the hole can better prevent cross contamination.
- Compatible with NEST pressure sensitive film, self-adhesive film and hot sealing film.
- Autoclavable.
- The tube wall of transparent 96-well PCR Plate is thin, allowing for good light transmission.
- White PCR 96-well plate is better for qPCR experiments.
- The maximum capacity of the 0.1ml tube is 150 μ L, and that of a 0.2 mL tube is 250 μ L.
- Certified DNase/RNase and Pyrogen Free.



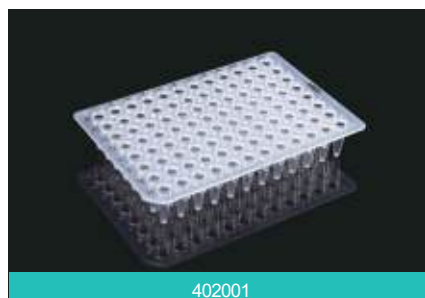
402101



402111



402201



402001



402011



402812

PCR Plate, No Skirt

Volume (mL)	Cut Position	Color	Tube	Notes	/Pack	/Case	Cat.No.
96-well 0.1	H12	Transparent	Low profile	/	25	100	402101
	H12	White	Low profile	/	25	100	402111
	A12 / H12	White	Low profile	Compatible with Roche	10	50	402812
96-well 0.2	H1	Transparent	High profile	/	25	100	402001
	H1	White	High profile	/	25	100	402011
	H12	Transparent	Elevated Wells	/	25	100	402201

- The low-profile design minimizes the condensate contamination and evaporation of reaction solution.
- 0.1ml tube and 0.2ml tube



402401



402411



402712



402301



402601

PCR Plate, Semi Skirt

Volume (mL)	Skirt Type	Notes	Cut Position	Color	Tube	/Pack	/Case	Cat.No.
96-well 0.1	Elevated Semi Skirt	Compatible with ABI models	A1	Transparent	Low profile	25	4	402401
	Elevated Semi Skirt	/	A1	White	Low profile	25	4	402411
	Semi Skirt	Compatible with Roche	H12	White	Low profile	10	5	402712
96-well 0.2	Semi Skirt	/	A12	Transparent	High profile	25	4	402301
	Semi Skirt	Compatible with ABI models	A12	Transparent	High profile	25	4	402601



402501/402521



402511



409013/409033

PCR Plate, Full Skirt

Volume (mL)	Skirt Type	Notes	Cut Position	Color	Tube	/Pack	/Case	Cat.No.
96-well 0.1 mL	Full Skirt	/	H1	Transparent	Low profile	25	100	402501
	Full Skirt	/	H1	White	Low profile	25	100	402511
	Full Skirt	Sterile	H1	Transparent	Low profile	25	100	402521
384-well 40 µL	Full Skirt	Compatible with Roche	A24+P24	White	Low profile	10	50	409013
	Full Skirt	Compatible with Roche, Sterile	A24+P24	White	Low profile	10	50	409033
	Full Skirt	Non-Sterile	A24+P24	Clear	Low profile	10	50	402901

Compatibility

402712 Compatible with lightcycler 480、lightcycler 480 II、lightcycler 96
 402812 Compatible with lightcycler 96
 409013、409033 Compatible with lightcycler 480 II

Precautions

- Select the appropriate plate according to the equipment
- During the experiment, the PCR film must be tightly attached to the plate to prevent evaporation

PCR Rack



- Fits all NEST PCR products.
- Stackable.
- Autoclavable.

Specification	Cap Type	Color	/Pack	/Case	Cat.No.
(1 Rack+1 Cap)/ Set, 8*12 Format	Flat	Blue rack+Transparent lid	1 rack +1 lid	25	407001
(5 Rack+1 Cap)/ Set, 8*12 Format	Flat	Blue rack+Transparent lid	5 rack +1 lid	5	407101

PCR Sealing Film

NEST PCR sealing film is compatible with NEST 96-well ELISA Plates and 96-well PCR Plates in various applications such as the ELISA/PCR amplification reaction and PCR fluorescence quantification, etc. Both the regular PCR sealing film and high-transparency film are available.



High Transparency PCR Sealing Film:

- NEST High Transparency PCR Sealing Film is made of a layer of transparent polypropylene film and a layer of transparent silicon-based pressure-sensitive adhesive.
- Applicable temperature is -70°C to 100°C.
- Pressure-sensitive film is non-adhesive to skin and gloves, which is convenient for experimental operation and does not affect optical analysis.
- Does not react with the experimental sample, the experimental results are more reliable.
- No autofluorescence.

Sealing Film:

- Material: non-permeable soft film; the adhesive is medical grade strong adhesive.
- Thickness: 100 µm.
- Economical and easy to use; compatible with a majority of PCR plates on the market.
- Good sealing performance.

Specification	Size (mm)	Usable Film Dimension	Color	/Pack	/Case	Cat.No.
Standard Sealing Film	146 × 81	124×81	Transparent	100	500	410001
New Advanced Sealing Film	137 × 80	118×80	Transparent	100	500	410011
PCR Sealing Film	141 × 83	118×80	Transparent	100	500	410021

Note: for life science laboratory research only, not for clinical drug treatment.

Recommended storage conditions: temperature range of 10-27 ° C; humidity range of 40%-60%.

PCR Scraper



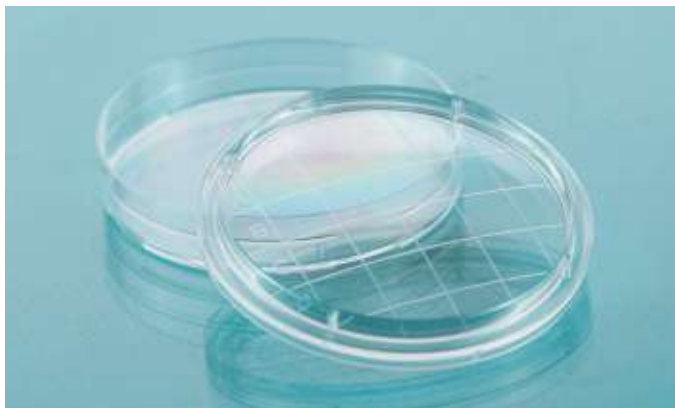
- NEST PCR Scraper is compatible with NEST High-transparency Sealing film and Standard Sealing Film, enabling the filming attached to the plates closer and ensuring better sealing performance.

Size (mm)	/Pack	Cat.No.
70*78	1	411001

Petri Dishes



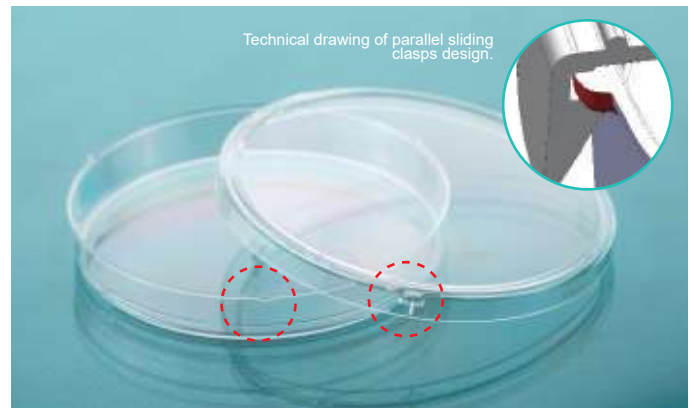
- Made of high clarity, 100% virgin polystyrene.
- Numeric marks at 3/6/9/12 o'clock at the bottom, making it convenient for users to determine the position of bacteria.
- Flat, transparent surface.
- PA/PE composite film packaging.
- Stackable for easy storage and handling.
- Each package has an independent item number and batch number identification, which is convenient for quality tracking and traceability.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.



RODAC Dish

RODAC Dish

Contact plates are used for detecting microorganisms on surfaces in cleanrooms. The contact plate method (Rodac Plate) is a standard approach in international guidelines (USP, EP) and the latest GMP for environmental monitoring of controlled areas. Compared to swab sampling, contact plates more accurately reflect the microbial presence at specific sampling points, reduce sampling steps, and improve accuracy and safety. They are simpler and more reliable than traditional swabs, making them an ideal choice for surface monitoring in pharmaceutical cleanrooms.



Petri Dish with Safe-lock Design

Petri Dish with Safe-lock Design

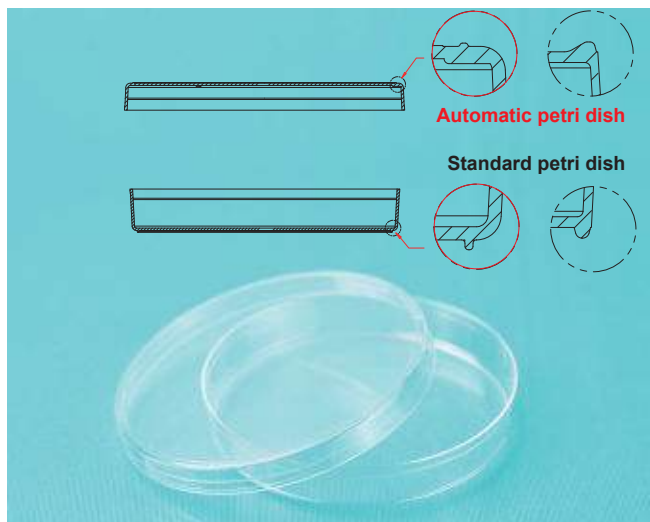
The top edge of the plate features multiple protrusions, while the inner edge of the lid has corresponding clips. Each clip has a sloped lower end and a slot at the upper end to receive a protrusion. After pouring the culture medium into the plate, the lid is placed on top and rotated clockwise. The lid's clips engage with the raised edges on the plate, securely locking the lid in place. This unique design ensures that the lid and plate do not separate during handling, preventing contamination.



Square Petri Dish

Square Petri Dish

Square-grid petri dishes are laboratory tools for bacterial culture and observation. The multiple square grids allow separation of different bacterial samples for various experiments and observations.



Automatic petri dish

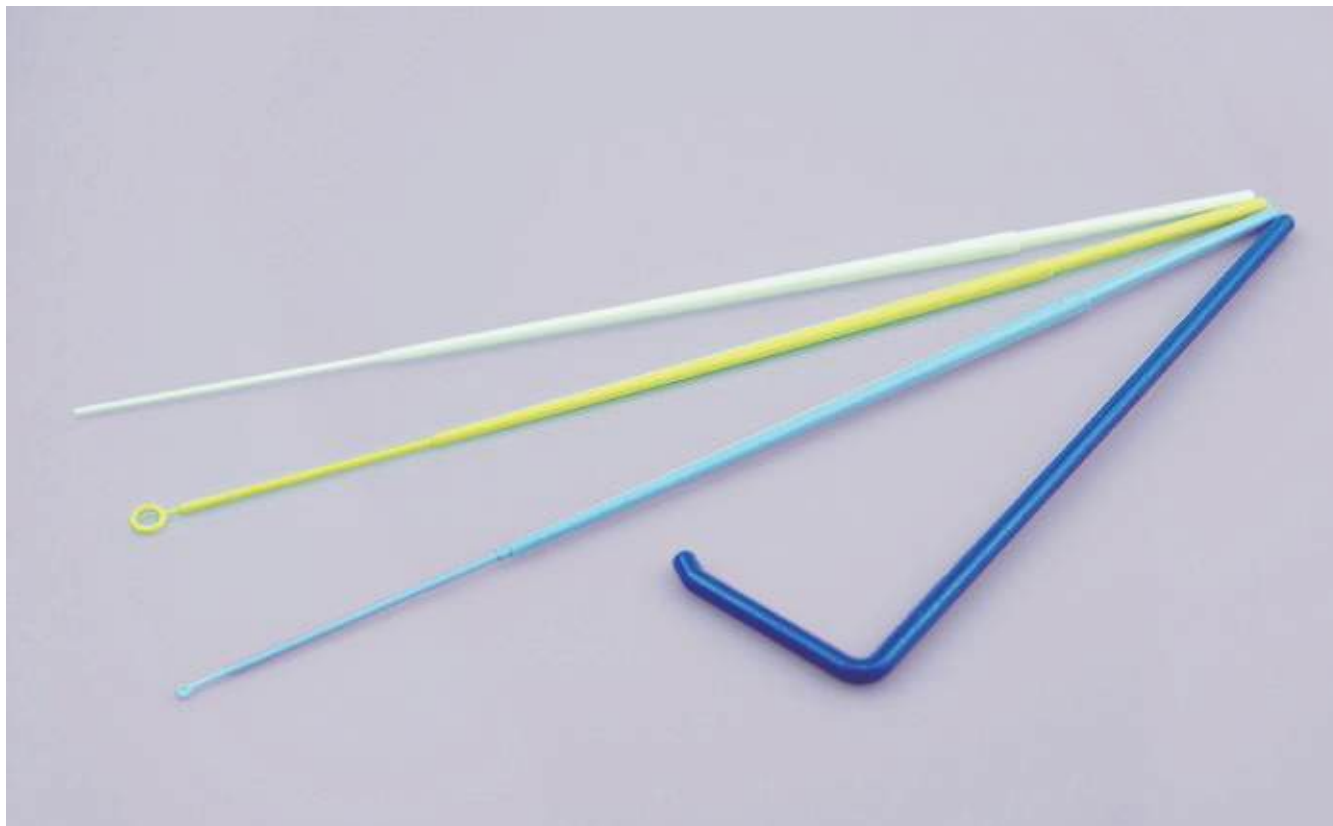
Automatic petri dish

Automated Petri dish with a sliding lid, designed for both stackability in manual use and ease of handling in automated systems.

Petri Dishes

Spec (mm)	Height (mm)	Volume (mL)	TC	Sterile	/Pack	/Case	Cat.No.
35	12	5	NO	Sterile	20	500	706011
60	15	15	NO	Sterile	20	500	754001
65	15	13-15	NO	Sterile	20	500	722011(RODAC)
	15	15 Safe-lock Design	NO	Sterile	20	500	722311
90	15	40	NO	Sterile	20	500	752001(US: 753001)
	15	40	NO	Sterile	20	500	753101
	15	40	NO	Sterile	20	500	752002(US: 753002) Double Bagged
	15	40	NO	Sterile	10	500	752004
	15	40	NO	Sterile	5	500	752003
	15	20 x 2 Compartments	NO	Sterile	20	500	752011(US: 753011)
	15	13 x 3 Compartments	NO	Sterile	20	500	752021(US: 753021)
	15	10 x 4 Compartments	NO	Sterile	20	500	752031(US: 753031)
	15	40 Safe-lock Design	YES	Sterile	20	500	752101
	20	40	NO	Sterile	20	300	753401(US: 752401)
	25	40	NO	Sterile	13	325	752501(US: 753501)
	15	60	NO	Sterile	10	100	715011
150	25	/	NO	Sterile	5	100	755001
	100×100×15	17.25	45	NO	20	500	753901

Inoculating Needles / Loops L-Spreader



Inoculating Needle / Loop

- PS material, hydrophilic.
- Flexible handles for easier collection and inoculation.
- Applied in microbiology experiments.
- Different colors for identification.
- Easy-tear sterile individual packaging.
- Each package has an independent item number and batch number identification, which is convenient for quality tracking and traceability.
- Sterilized by Ethylene Oxide.

L-Spreader

- Sterile L-Spreader, made of medical ABS.
- Sterilized by E-beam, Non-Pyrogenic.
- Smooth and flat surface that avoids problems such as contamination or uneven application of spread plate in bio-labs.
- Length of handle: 144mm, diagram of spreading: 33mm, suitable for 3.5cm, 6cm, 9cm, 10cm petri dishes and etc. Ideal for spreading cells or bacteria evenly in the culture dish.

Volume (μL)	Name	Color	/Pack	/Case	Cat.No.
/	Inoculating Needle	White	400	4000	716001
1	Inoculating Loop	Blue	400	4000	717101
10	Inoculating Loop	Yellow	400	4000	718201
/	L-Spreader	Blue	200	2000	711001
/	L-Spreader	Blue	5	500	711002



Cell Culture Reagent Products

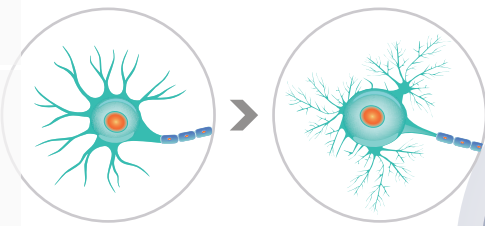
GelNest™ Matrix

GelNest™ Matrix is derived from mouse tumor tissue and contains extracellular matrix components such as laminin, type IV collagen, heparan sulfate proteoglycans, and more. These components support cell adhesion, differentiation, and proliferation, providing signals for these processes. Additionally, they simulate the characteristics of the basement membrane in the physiological environment, enhancing the success rate and effectiveness of cell culture.

In addition to the matrix components, GelNest™ Matrix is rich in various growth factors. These growth factors promote cell differentiation, proliferation, and migration, mimicking cellular signaling pathways and interactions in the physiological environment. GelNest™ Matrix has a wide range of applications, particularly in tissue engineering, cell culture, and research. It can be used for organoid culture, stem cell differentiation, angiogenesis, migration or invasion assays, and in vivo tumor studies.

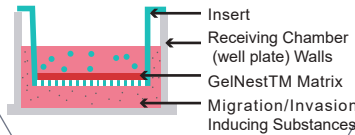
1 2D Culture Coating

Promotes cell growth and provides a favorable environment for attachment and proliferation.



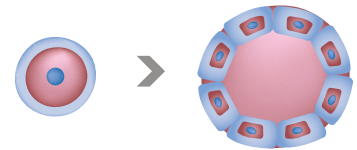
2 Cell Migration and Tumor Invasion Experiments

Used in combination with NEST Cell Culture Insert to provide a more realistic cellular growth environment.



3 Organoid Culture

Provides a 3D cell growth environment that is physiologically relevant for studying organ development and function.



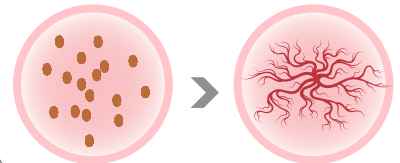
6 In Vivo Tumor Formation Experiment

Used for in vivo tumor formation experiments in mice to study tumor growth and treatment.



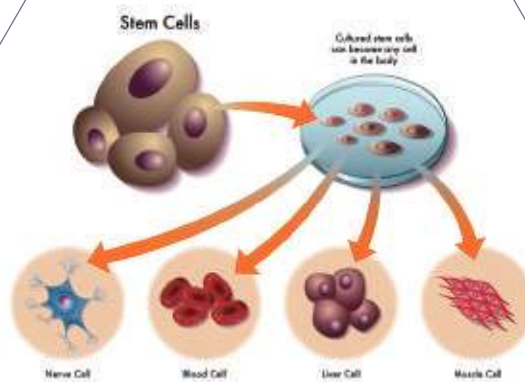
4 In Vitro/In Vivo Blood Vessel Formation

Provides a 3D cell growth environment that is physiologically/pathologically relevant for studying neovascularization and maturation.



5 Stem Cell Differentiation

Used for studying stem cell differentiation and tissue regeneration.



GelNest™ Matrix

Organoid Culture Test

1. Re-suspend the single-cell suspension for organoid culture in pre-cooled basal medium at 4°C and perform cell counting.
2. Mix the cells with the gel solution and add the mixture to pre-warmed 24-well plates. Each well should contain approximately 5×10^4 cells and 60 μ L of matrix gel.
3. Immediately place the plates in the incubator, and the gel will solidify in approximately 10 minutes.
4. Add 500 μ L of organoid culture medium for cultivation.
5. Wait for 3-5 days for the organoids to form. Finally, image the live cells using high-content microscopy to determine the sensitivity of the organoids to various drugs.

This method provides an efficient and convenient solution for organoid culture and can be used in areas such as drug screening and tumor research.

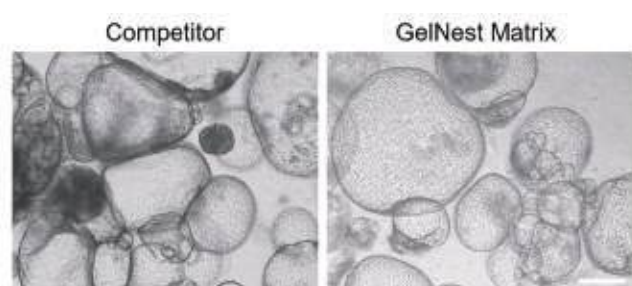


Figure 1. Growth of Human Bile Duct-like Organoids in competitor's matrix gel and GelNest™ Matrix after 5 Days. Scale bar: 300 μ m.

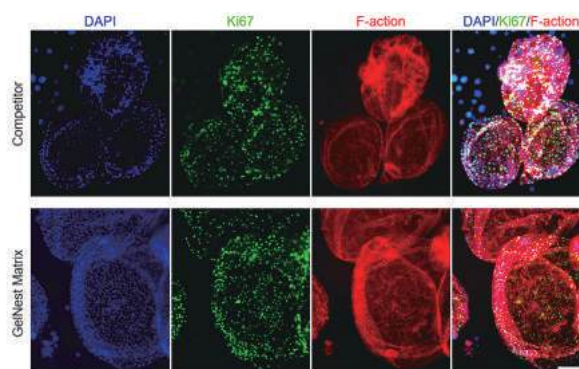


Figure 2. Growth of Human Bile Duct Cancer-like Organoids in competitor's matrix gel and GelNest™ Matrix after 6 Days. Scale bar: 200 μ m.

Stem Cell Differentiation Test

For human embryonic stem cells (hESCs) and induced pluripotent stem cells (iPSCs) without feeder layer culture:

1. Thaw GelNest™ Matrix stored in freezing conditions and let it thaw overnight in a 4°C ice bath. Gently blow and mix the gel three times with a pre-cooled pipette tip for thorough mixing. Transfer the thawed matrix gel using the pre-cooled pipette tip. If bubbles form, briefly centrifuge with a handheld centrifuge to remove them.
2. Preheat the cell culture plates in the incubator.
3. Dilute the gel solution in pre-cooled serum-free medium at a 1:100 ratio. Make sure to cover the entire culture plate with the diluted gel solution. The recommended amount is 300 μ L/cm² in the culture dish.
4. Leave the culture plates with the modification solution at room temperature for 1 hour.
5. Remove the modification solution and immediately seed the stem cells mixed with mTeSR in the culture plate. Be cautious to prevent the surface of the modified culture plate from drying out.

This method provides an efficient and convenient solution for stem cell culture and is expected to play an important role in tissue engineering, regenerative medicine, and other fields.

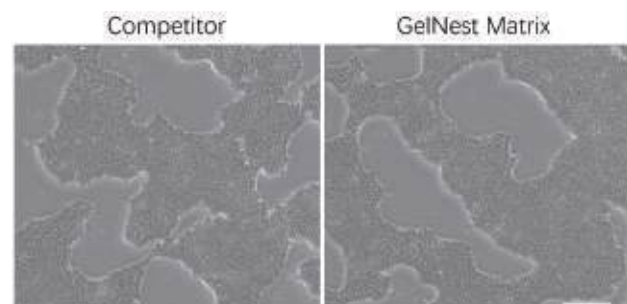


Figure 3. Results of human embryonic stem cells grown on competitor's matrix gel-modified surfaces and GelNest™ Matrix-modified surfaces for 3 days. Scale bar: 300 μ m.

GelNest™ Matrix

In Vitro Blood Vessel Formation Test

1. Replace the complete growth medium with starvation medium for cells: DMEM medium containing 0.2% FBS, 2mM L-glutamine, 1mM sodium pyruvate, 100U/mL penicillin, and 100µg/mL streptomycin. Starve the cells for 24 hours.
2. Spread 50µL of GelNest™ Matrix evenly on the bottom of a 96-well plate. To prevent the gel from adhering to the pipette tip, aspirate and blow FBS once in the pipette tip to wash the inner wall of the pipette tip with FBS.
3. Place the 96-well plate in a 37°C cell culture incubator and incubate for 30 minutes to solidify the gel.
4. Digest the endothelial cells and perform cell counting.
5. Add 5×10^4 HUVEC cells to the 96-well plate containing the gel, totaling 200µL of cell suspension. Place the 96-well plate in the incubator for cultivation.
6. Vascular-like network structures will form within 3 to 12 hours. This is the optimal observation time.
7. At the optimal observation time, carefully remove the culture medium and stain with culture medium containing a 1/1000 concentration of Calcein AM (green). Image the cells using a microscope and record the morphology and characteristics of the vascular network.

This experiment can be used in the fields of angiogenesis and cardiovascular disease research.

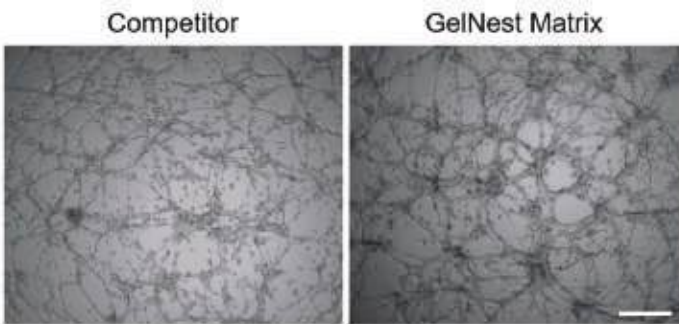


Figure 4. Results of endothelial cells forming a vascular network after 9 hours of cultivation on competitor's matrix gel and GelNest™ Matrix. Scale bar: 300µm.

Cell Invasion Test in Cell Culture Insert

1. HT-1080 cells cultured in MEM medium supplemented with 10% fetal bovine serum (FBS) are used in this experiment. When the cell density reaches 80% to 90%, take 20µL of GelNest™ Matrix Gel and dilute it 50 times with serum-free MEM to a final volume of 1000 µL. Gently blow and mix the matrix gel with a pipette for thorough mixing. Add 100µL of the diluted gel mixture to the center of the insert, evenly covering the surface of the insert with the gel mixture. Incubate the culture dish at 37°C for 1 hour to allow gel formation.
2. After trypsinization of the cells (generally, for a 6-well plate, digest with 200µL of trypsin at 37°C for 3 minutes, then terminate the digestion with 10% serum and centrifuge at 300g for 3 minutes), resuspend the cells in serum-free MEM and perform cell counting. Take 750µL of cell suspension at a starting concentration of 1×10^6 /mL (estimated to be 10 wells, with 7.5×10^4 cells per well, totaling 750,000 cells), and dilute with serum-free MEM to a final volume of 1.5mL. Then, add 150µL of cell suspension to the upper chamber of each insert, resulting in 7.5×10^4 cells/well. For the experimental group, 800µL of medium containing 10% fetal bovine serum (FBS) as a chemoattractant will be added to the lower chamber. In contrast, the control group will receive 800µL of medium without FBS in the lower chamber. Culture the cells in a humidified incubator at 37°C and 5% CO₂ overnight.
3. Discard the culture medium in the inserts and wash twice with PBS. Then, stain the cells on the lower surface of the membrane with crystal violet for 10 minutes. Subsequently, wash the inserts twice with PBS to remove unbound crystal violet. Gently remove the cells inside the inserts with a wet cotton swab and allow them to air-dry. Observe and image the invaded cells under a microscope. To elute the bound crystal violet, dilute acetic acid to 33% (v/v) with ddH₂O. Add 400µL of 33% acetic acid to each insert and shake on a shaker for 10 minutes. Next, transfer the eluent from the lower chamber to a 96-well transparent microplate. Measure the absorbance at 590nm using an ELISA reader.

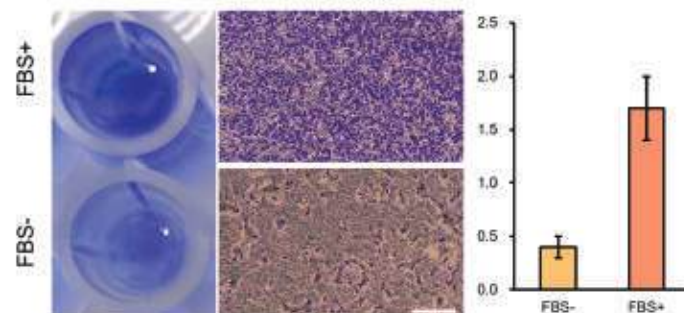


Figure 5. Results of HT-1080 cells cultured on competitor's matrix gel-modified surface and GelNest™ Matrix Gel-modified surfaces forming a vascular network after 9 hours. Scale bar: 200µm. The results indicate that FBS can significantly induce cells to penetrate the semi-permeable membrane of the extra-cellular matrix and enter the lower surface of the insert.

GelNest™ Matrix

GelNest™ Matrix Quality Assurance



Protein Concentration

The protein concentration is guaranteed to be between 8~20mg/mL.



High Safety Performance

There are no LDEV (Lactate Dehydrogenase Elevated Virus), bacteria, or mycoplasma present.



COP Bottle

Tolerant to temperatures as low as -196°C
Less susceptible to breakage compared to glass
Non-absorptive of proteins
Withstands solutions with pH >10 without delamination, thereby ensuring the safety of the matrix gel.



Endotoxin Level



The endotoxin level of the standard matrix gel is <4 EU/mL; and the low-endotoxin matrix gel is <1.5 EU/mL.

Stable Performance



The gel formation performance remains stable.

Experimental Testing



Tests for angiogenesis, tumor invasion, and tumor formation have been successfully conducted.

GelNest™ Matrix Selection Guide

Product	Growth Factor	Phenol Red	Recommended Applications	Normal		Low Endotoxin
				2 Bottles/Bag	1 Bottle/Bag	1 Bottle/Bag
GelNest™ Matrix	Normal	Yes	General 2D, 3D cell culture	211211	211212	211312
GelNest™ Matrix, without Phenol Red	Normal	No	Requires colorimetric identification (such as fluorescence) or sensitivity to steroids	211221	211222	211322
GelNest™ Matrix, low growth factor	Low	Yes	2D, 3D cell culture with higher accuracy requirements for matrix components and requires	211231	211232	211332
GelNest™ Matrix, low growth factor, without Phenol Red	Low	No	2D, 3D cell culture with higher accuracy requirements for matrix components and requires colorimetric identification or sensitivity to steroids	211241	211242	211342
GelNest™ Matrix, high concentration	Normal	Yes	In vivo tumor formation, thrombosis test, angiogenesis experiment, general cell culture, etc.	211251	211252	211352
GelNest™ Matrix, high concentration, without Phenol Red	Normal	No		211261	211262	211362
GelNest™ Matrix, for stem cells	Low	Yes	hESC stem cell culture	211271	211272	211372
GelNest™ Matrix, for organ-like structures, without Phenol Red	Low	No	Organoid culture and differentiation	211281	211282	211382
GelNest™ Matrix (for Angiogenesis Experiments)	Normal	No	Angiogenesis Experiments	/	/	211492

Storage and Operation Instructions

To store GelNest™ Matrix, it is recommended to keep it in a -20°C freezer until ready for use. Prior to initial use, thaw the gel and divide it into single-use portions. Store these portions in a -80°C freezer for a maximum of 2 years. Please note that GelNest™ Matrix Gel should not be stored in a frost-free freezer.

GelNest™ Matrix is in a liquid state at 4°C and transitions into a gel state at 37°C. It starts to solidify into a gel when the temperature exceeds 10°C. For optimal performance, it is advised to pre-chill the pipette tips and conduct the procedures on ice.

Serum Free Supplement

Common Applications

The culture additive (N-27 serum-free additive, 50X) is mainly used for:

- Serum substitute
- Growth of hippocampal neurons
- iPSC differentiation
- Growth of various CNS neurons
- Organoid culture
- Additive in neuronal cell base medium

N-27, 50X serum-free supplement is provided in a 50-fold concentrated form. Just add 1/50 of the volume to the culture medium to reach the final concentration. This high-concentration design makes N-27 serum-free supplement easy to use, reduces storage space and transportation costs, and ensures consistency each time it is used.



Feature	Description	Packaging	Cat.No.
50X	• Does not contain any animal-derived components, avoiding the risk of infection and batch differences that may be brought by the use of fetal bovine serum. • Provides appropriate nutrients and growth factors for various cell types. • Suitable for the culture of various cell types, including neurons, muscle cells, stem cells, etc.	5mL/bottle, 2bottles/pack	211611
50X, minus Vitamin A	• Contains antioxidant mixtures to reduce oxidative damage. • Suitable for the culture of neural progenitor cells and stem cells to prevent stem cells from differentiating into neurons. (Does not contain retinoic acid, and the retinoic acid in the standard N-27 supplement can replace retinoic acid to stimulate the differentiation of neural precursor cells/stem cells (NSCs)) • Intends to be used with Neurobasal or Neurobasal-A medium.		211621
50X, minus insulin	• Used in cultures that require strict control of insulin concentration, such as the growth of hippocampal and other central nervous system neurons, to meet these specific needs. • Intends to be used with Neurobasal medium or Neurobasal-A medium.		211631

Growth Factor

Wnt is a large family of secreted proteins, among which the classical Wnt signaling pathway is well known. Wnt3A serves as a key ligand in this pathway and is essential for normal hippocampal development, body patterning, and tail bud formation during embryogenesis. It also promotes the self-renewal of hematopoietic, neural, and embryonic stem cells.

Detection Items and Data

Bacteria, fungi: Negative

Mycoplasma: Negative

Lactate Dehydrogenase-Elevating Virus (LDEV): PCR Negative

Endotoxin: <4EU/mL

Product Advantages

- Promotes cell growth and proliferation: WRN growth factor stimulates cell division and proliferation, helping maintain normal cell growth.
- Enhances DNA repair: WRN protein plays a key role in DNA repair, aiding in the restoration of damaged DNA and reducing genetic mutations.
- Anti-aging effect: The WRN gene is closely related to cellular aging; WRN growth factor helps slow down cell aging and maintain cellular vitality.

Application Directions

- Cell biology research: Applicable to studies on DNA damage repair mechanisms, cell cycle regulation, cell proliferation, and apoptosis.
- Medical research: Mutations in the WRN gene cause Werner syndrome—a rare genetic disorder characterized by premature aging. Therefore, WRN growth factor can be used to study the pathogenesis and potential treatments of Werner syndrome, as well as other aging-related diseases.



Description	Packaging	Cat.No.
Wnt3A, R-spondin 3, Noggin, Mouse origin, 10X conditioned culture media	100 mL/bottle, 1 bottle/pack	211511

Fetal Bovine Serum

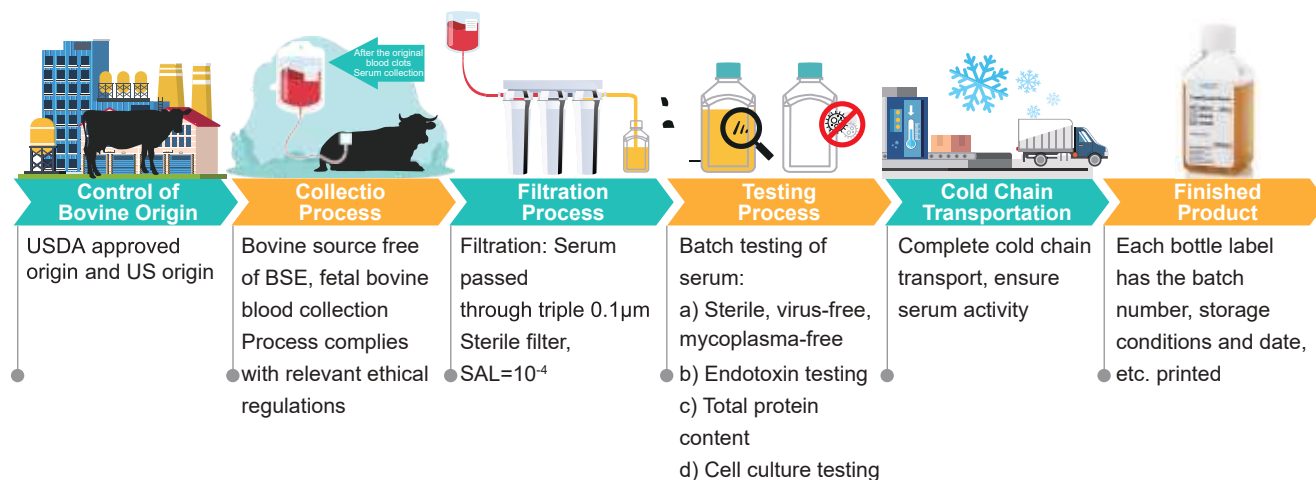
Fetal bovine serum (FBS) is the most widely used supplement in in vitro mammalian cell culture. It covers almost all the components needed for research in the life sciences industry, providing almost all the necessary ingredients for adherent and suspension cell culture, most of which have not yet been chemically defined, such as growth factors, attachment factors, transport proteins, lipids, and hormones. FBS is commonly used for cell line proliferation and primary culture, and is widely used in basic research, target/drug discovery, drug development, and clinical research.

FBS is extracted from the coagulated whole blood collected by puncturing the heart of the fetus. The serum is immediately centrifuged after collection, frozen, and transported to the processing plant. Upon arrival at the processing plant, the serum is thawed and passed through three 100nm (0.1µm) sterilizing filters, and then bottled through a sterile bottling process.

All batches of NEST® FBS undergo strict sterility, mycoplasma, and virus testing. Each batch of serum will also undergo cell growth, plate efficiency, and clone efficiency tests on the following cell lines: HeLa, L929, SP2/O-AG14, MRC-5. Certified serum also need to undergo a series of additional tests, including endotoxins, chemical components, protein electrophoresis, and radioimmunodiffusion tests.

Quality Assurance

- Total protein content: 40±5 g /L
- Endotoxin level < 5EU/mL
- Hemoglobin level < 30 mg /100 mL
- Promote growth > 80% guarantee



Source:

An important factor to consider in serum quality is the source of the serum, therefore, the traceability of the serum is crucial. Each production batch of NEST® FBS is strictly controlled, starting from serum collection, through all processing and production stages, to final packaging. NEST® guarantees the accuracy of the geographic source of the serum and all other data declared on the Certificate of Analysis (COA).

Filtering and Packaging:

The raw serum is filtered through three 0.1µm sterile filters. The filtered serum is thoroughly mixed to ensure uniformity. NEST® products are packaged through a sterile filling process, each step of which is executed to ensure that the product complies with industry sterility assurance level standards SAL=10⁻⁴ (i.e., during the manufacturing process, the bacterial and fungal contamination level of the product does not exceed 1 in 10,000 units). The filtering and bottling are carried out in a positive-pressure HEPA-filtered controlled environment room.



Product Name	Specification	Cat.No.
Nest Fetal Bovine Serum (FBS)	500 mL/bottle	209111

Storage and Transportation Conditions

The storage conditions, batch number, and expiration date of NEST® FBS are indicated on the label. The storage condition is -20°C, and the shelf life is 60 months. When the product is stored correctly, the best product performance can be guaranteed. It needs to be transported at -20°C or on dry ice.

Batch Stability Test Items

1. Sterility

The products are all sterility tested based on the EP or USP to ensure no bacteria, yeast, E. coli phages, etc. Sterile filtration, aseptic packaging and each batch will be sampled for sterility testing.

2. Mycoplasma

Each product batch must be tested for the presence of mycoplasma. Mycoplasma in the serum is detected through culture methods.

3. Hemoglobin

Quantitative and colorimetric methods are used to determine the residual hemoglobin concentration in each product batch.

4. Cell Culture Test

Each batch of FBS is tested for in vitro culture effects of specific cell lines, mainly evaluated based on the following three aspects:

- a) Growth promotion
- b) Cloning efficiency
- c) Plating efficiency

The following cell lines are used to determine the growth promotion and function of FBS:

Cell Line	Cell Type	
HELA Species	Cancer Cells	Human
L929	Fibroblasts, Macrophages	Mouse
SP2/0-AG14	Lymphoma	Mouse
MRC-5	Lung	Human

Add cell culture media with a concentration of 10% serum to the test to evaluate the biological performance, and record the growth! morphology of the cells.

5. Endotoxin test (LAL)

All serum have been quantitatively tested by color dynamics to determine and quantify endotoxin levels.

6. Protein concentration test

Protein Test Type	Method
Total Protein	Biuret Colorimetry
Albumin	Immunoturbidimetry
Globulin	Immunoturbidimetry

7. Osmotic Pressure

Osmotic pressure is determined by lowering the freezing temperature. Osmometers are calibrated with traceable standards.

8. No BSE Testing

For materials derived from bovine, bovine spongiform encephalopathy (BSE) testing is conducted before the corresponding blood can be processed. NEST fetal bovine serum is BSE-free serum.

9. Bovine Serum Specific Virus Testing

Each batch of serum undergoes additional virus testing using cell culture techniques. The serum is inoculated on GBK cells to detect the absence of the indicated virus. Virus detection is performed through indirect immunofluorescence, including BVD, IBR, and PI3 viruses, and the test is negative.

Purpose Statement

NEST fetal bovine serum is for research applications only. It is the end user's responsibility to verify the suitability of these products for their specific applications. These products are not for diagnostic use. The safety and effectiveness of these products in diagnostic or other clinical uses have not yet been determined.

RPMI 1640 Medium



Named after Roswell Park Memorial Institute (RPMI), RPMI 1640 is a modified version of McCoy's 5A medium using a bicarbonate buffering system. Originally developed for human leukemia cells in suspension or monolayer culture, it was later found suitable for many mammalian cells, including HeLa, Jurkat, MCF-7, PC-12, PBMCs, astrocytes, and cancer cells. It is especially effective for suspension cultures and is among the most widely used media.

Compared with other media, RPMI 1640 contains reduced glutathione and higher levels of vitamins. It also includes biotin, vitamin B12, and p-aminobenzoic acid, as well as elevated choline chloride and inositol, which are absent in EMEM and DMEM.

Product Name	Specification	Cat.No.
RPMI 1640 Medium (with L-glutamine; without sodium pyruvate, HEPES, or antibiotics)	500mL/Bottle	209021

The formulation of this RPMI 1640 medium is as follows:

With	Without
Glucose (2000mg/L)	Sodium pyruvate
L-glutamine (300mg/L)	HEPES
Phenol red(5mg/L)	

*For a more detailed formulation, please refer to the product manual.

DMEM High-Glucose Medium



DMEM Medium (Dulbecco's Modified Eagle Medium) is a widely used basal medium suitable for various mammalian cells, including primary fibroblasts, neurons, glial cells, HUVECs, smooth muscle cells, and cell lines such as HeLa, 293, Cos-7, and PC-12. Developed from MEM, DMEM contains twice the amino acids and four times the vitamins of MEM, along with added non-essential amino acids, trace iron, and sodium pyruvate.

Originally designed as a low-glucose medium (1000 mg/L), DMEM also exists in a high-glucose formulation (4500 mg/L), which is commonly used for fast-growing or weakly adherent cells, hybridoma myeloma cells, cloned or transfected cells, primary viral host cells, single-cell cultures, and vaccine production—such as CHO cell-based EPO expression or hepatitis B vaccine manufacturing.

Product Name	Specification	Cat.No.
DMEM High-Glucose Medium (with L-Glutamine and Sodium Pyruvate; without HEPES and antibiotics)	500mL/Bottle	209011

The formulation of this DMEM High-Glucose Medium is as follows:

With	Without
Glucose(4500mg/L)	·HEPES
L-Glutamine(4mM)	
Sodium Pyruvate(110mg/L)	
Phenol Red(158mg/L)	

*For a more detailed formulation, please refer to the product manual.

α -MEM Medium



MEM (Minimum Essential Medium) is a nutrient-supplemented basal medium, also called minimal essential or low-limit Eagle medium. It contains 12 essential amino acids, L-glutamine, and 8 vitamins. Developed by Harry Eagle from Eagle's Basal Medium (BEM), MEM supports the growth of adherent cells like fibroblasts when supplemented with serum, and can be adapted for other cell types.

α -MEM is MEM supplemented with non-essential amino acids (NEAA), sodium pyruvate, zinc sulfate, vitamin B12, biotin, ascorbic acid, and other components. It is widely used for both adherent and suspension mammalian cells. The seven NEAAs—L-alanine, L-glutamic acid, L-asparagine, L-aspartic acid, L-proline, L-serine, and glycine—reduce the metabolic burden of cells and promote proliferation.

Product Name	Specification	Cat.No.
α -MEM Medium (with nucleosides)	500mL/Bottle	209041

Cell Cryopreservation Reagents

Cell Cryopreservation Reagents provide a protective and nutrient-rich environment for cells during freezing. It lowers the freezing point and increases membrane water permeability, allowing intracellular water to exit before freezing and reducing ice crystal damage. This preserves cell characteristics while temporarily halting growth, enabling direct recovery of cell activity when needed.

Table 1: Comparison of Traditional Cryopreservation Medium and Serum-Free Non-Programmed Cryopreservation Medium

Composition	Chemically defined; contains nutrients and protective agents; serum-free
Preparation	Ready-to-use; store at 4 °C; use directly
Freezing procedure	Simple and fast; place directly at -80 °C, saving time and effort
Recovery rate	High, even for small-volume cryopreservation
Storage equipment	Liquid nitrogen or -80 °C freezer
Safety	No risk of contamination from serum-derived viruses, fungi, or mycoplasma
Applicable cell types	Suitable for all cell types, especially serum-adapted cells; saves re-adaptation steps
Batch consistency	Minimal batch-to-batch variation
Whole-plate freezing	Feasible, convenient, and fast



Description	Application	Cat. No.
Serum-Free Non-Programmed Cryopreservation Medium (Phenol Red-Free)	Chemically defined with sugars, amino acids, and protective agents like DMSO, this medium reduces ice crystal damage and improves cell recovery and viability. Serum- and protein-free, it contains no animal components, minimizing contamination risks. Cells or tissues can be directly resuspended and stored at -80 °C or transferred to liquid nitrogen without programmed freezing.	211072
Dimethyl Sulfoxide (DMSO)	Sterile packaging, suitable for cell cryopreservation and also usable as a solvent for preparing cell treatment solutions.	211081

Cell Digestion and Dissociation Reagents

During in vitro and primary cell culture, tissue dissociation and digestion reagents are needed to separate and disperse cells, enabling preparation of single-cell suspensions or adherent cell passaging. Commonly used digestion reagents include trypsin-EDTA, collagenase, and dispase. NEST offers a range of cell dissociation solutions with varying strengths to meet different needs in primary cell isolation and adherent cell culture.



Product Name	EDTA	Phenol Red	Application	Cat. No.
0.25%Trypsin-EDTA, Phenol Red	✓	✓	The improved product digests cells more quickly, achieving digestion performance comparable to imported products, and is especially suitable for hard-to-digest cells.	211052
0.25%Trypsin-no EDTA, Phenol Red-Free	×	×		211062

Antibiotics and Mycoplasma Removal Reagent

In routine cell culture, contamination mainly includes microbial contamination and cross-contamination between cell lines, with microbial contamination being the primary concern. NEST® provides commonly used cell culture-grade antibiotics and antifungal agents to help control or eliminate contamination. Please refer to the table below to select suitable reagents for microbial contamination prevention.

Microorganism Type	Product Name	Cat. No.
Bacteria	Penicillin-Streptomycin Solution, Sterile	211092
	Gentamicin Solution, Sterile (50 mg/mL)	211132
Fungi	Water-Soluble Amphotericin B	211142
Mycoplasma	Mycoplasma Removal Agent (1000X)	211162

Note: If contamination occurs in your cell culture, be aware that antibiotics or antifungal agents may be toxic to certain cell lines. Always perform a dose-response test beforehand to determine the concentration that does not affect normal cell growth.



211092



211132



211142



211162

Balanced Salt Solution, BSS

Balanced Salt Solution (BSS), also known as Physiological Solution, combines the buffering capacity of buffer solutions, the isotonicity of saline, and the nutrient supply of culture media. It helps maintain osmotic pressure, stabilize pH balance, and provide basic nutrients, ensuring cell survival and metabolic activity in vitro.

Product Description

This product is one of the most commonly used buffer solutions, mainly composed of sodium chloride, potassium chloride, disodium hydrogen phosphate, and potassium dihydrogen phosphate. It is free of Ca^{2+} and Mg^{2+} , with a pH of 7.2–7.4. Sterile filtered, it is commonly used for cell washing and other routine applications in cell culture.

Product Advantages

This reagent is a ready-to-use 1X working solution.



Product Name	Application	Specification	Cat. No.
PBS (1X), cell culture grade	Used for cell washing before digestion, during culture, and for general solution preparation.	500mL/bottle	211031

Quick-KO®

Intended Use

NEST Quick-KO® Gene Knockout Kit is an all-in-one ready-to-use CRISPR Knockout Kit tailored for scientific researchers. It contains the vital materials required for CRISPR knockout, from sgRNA design to cell lines knockout. It can successfully complete gene editing experiments while sharply improving the scientific research efficiency.

Features

- All-in-one design for one-stop experiments.
- Easy and convenient operation throughout the experiment.
- No need to construct plasmids, saving time and simplifying the procedures.
- Validated sgRNA to improve the success rate of the experiment.
- Rapid genotype verification of cellular target genes without the need to extract and purify DNA.
- The risk of failure reduced and experiment cost saved.



Ready-to-use Reagents with Simplified Operation

NEST Quick-KO® Gene Knockout Kit contains constructed plasmids (or lentiviruses) and genes type identification primers that express sgRNA and Cas9. The kit is simple and convenient for customers to use directly.

	Categories	Storage Temperature	Specification
Quick-KO® Plasmid	Valid sgRNAs	-20°C	20µg
	NC gRNA	-20°C	20µg
	Optimized SpCas9	-20°C	80µg
DNA Lysis	Buffer A	-20°C	1.0 mL
	Buffer B	-20°C	50µL
Validity Test	2X High Fidelity Pfu Mix (+Dye)	-20°C	1.0mL*2
	gDNA Ctrl	-20°C	50 µL
	Genotyping Primer F	-20°C	1OD
	Genotyping Primer R	-20°C	1OD

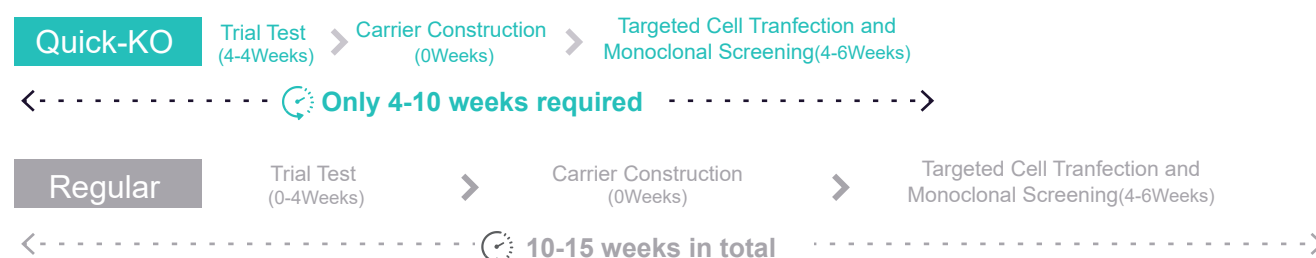
Optimized Design for Efficient Knock-out

As Quick-KO® can obtain multiple alleles to completely knock off cell lines, its efficiency is 3-5 times of that of traditional single sgRNA gene knockout strategy. Deploying an optimized multi-wizard strategy, it guides Cas9 by sgRNA to cut specific gene locus, which results in DNA double-strand Break (DSB) and induces fragment deletion and finally knocks out the gene function. Meanwhile, the sgRNA contained in Quick KO has been tested on 293T cells and verified of improving research success rate.

Two Marks for Free Choice

SgRNA attached to NEST Quick-KO® Gene Knockout Kit has double marks, fluorescence (mCherry) and drug sieve (puro) for customers' choice according to their demand.

Time saved and cycle shortened to the minimal 4 weeks





Pharmaceutical Packaging

Pen Injector

With the rapid growth of chronic disease management and personalized therapy, pen injectors have become a mainstream drug delivery method. They simplify administration, allowing patients to inject safely and conveniently anytime, anywhere.

NEST offers a range of solutions including reusable pen injectors, cost-effective disposable pens (standard, SP, internal-rotation, automatic), and complementary no-wash/no-sterilization products (cartridges, prefilled syringes), providing safer, more convenient, and user-friendly self-administration options for the biopharmaceutical industry.

Compatible drugs include semaglutide, FSH, liraglutide, insulin, and growth hormone. NEST also offers independent mold design and development, enabling precise matching and customized solutions.



Product Advantage

1 Independent R&D and Mold Manufacturing Capability

Core structures and molds independently designed and manufactured.

2 Precise Injection Molding Process

High-precision dimensional control ensures product consistency.

3 Automated Product Assembly

Improves efficiency and reduces costs with precise and stable performance.

4 Customizable Services

Appearance, color, dosage, and graduation markings can all be tailored to customer requirements.

5 Diverse Product Specifications

A full range of options is available to match different pen injector specifications with various drugs.

6 Product Validation & Patent Risk Mitigation

Complete product validation reports in compliance with international standards. Patent-risk mitigation measures implemented — FTO searches/analyses performed for China, the USA, and Europe.

TSA Disposable Pen Injector



Disposable Pen Injector



Comparison of External-Rotation vs. Internal-Rotation Pen Injectors

External-Rotation Type ▼



Rotating Pen Body Dose Selector with Outward-Extending Component Structure

VS

Internal-Rotation Type ▼



After Rotation, No Outward-Extending Components

TSA Disposable Pen Injector

Product Certifications

China CDE No.B20250000677

Applicable Drugs

For injection of insulin, GLP-1 receptor agonists, follicle-stimulating hormone (FSH) and related medications, such as insulin degludec, semaglutide, liraglutide, and Gonal-F, mainly used for diabetes treatment, weight management, and assisted infertility therapy.

Product Advantages

- ✓ Easy Operation: No professional guidance needed; simply press to administer the dose.
- ✓ Multiple Specifications: Available in 36/37/50/60/70/72/74/75/80 IU, with customization options.
- ✓ User Feedback: Visual and auditory cues during dose setting and injection enhance confidence.
- ✓ High Cleanliness: Injection molding, assembly, and packaging conducted in a 100,000-class cleanroom.
- ✓ Flexible Packaging: Options include bagged or tray packaging.
- ✓ Special Structural Design: Dose cannot exceed the remaining amount in the pen cartridge.
- ✓ FTO Analysis Completed: Covered China, the U.S., the U.K., and Europe.

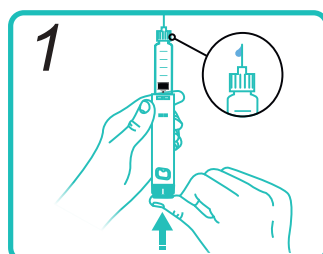
Dose Unit

Dose Unit	Cartridge (Min. Dose)
36 Units	3.0 mL (0.02 mL)
37 Units	3.0 mL (0.01 mL)
50 Units	3.0 mL (0.01 mL)
60 Units	3.0 mL (0.01 mL)
70 Units	3.0 mL (0.01428 mL)
72 Units	3.0 mL (0.01 mL)
74 Units	3.0 mL (0.01 mL)
75 Units	3.0 mL (0.01 mL)
80 Units	3.0 mL (0.01 mL)

Product Parameters

Injection Dose Range	0.01-1.0mL
Auditory Feedback	Auditory Feedback During Dose Adjustment
Viewing Window	Easy to Identify and Use
Injection Start Force	≤15N
Dose Accuracy	Professional Data Validation Available

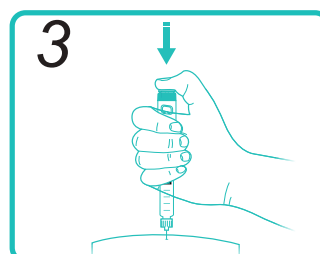
Operating Instructions



Preparation



Dose Adjustment



Injection



Non-refillable: Discard the Entire Pen After Use

NEST



Pharmaceutical
company partner



Final Assembly



Tray Packaging



Turnover Box Packaging

01



02



Finish



Disposable Pen Injector

Product Certifications

USA510(k) No.K240961

USA DMF NO.40744

Canada Medical Device License

Indonesia Medical Device Registration Certificate

MDSAP Five-Country Certification

China Class II Medical Device Certificate

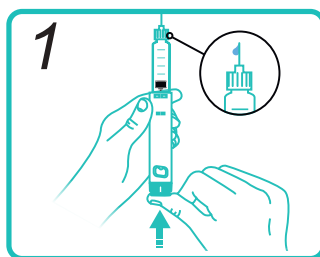
NEST Type China CDE:B20230000891

SP Type China CDE: B20240000529

Product Advantages

- ✓ Highly customizable: appearance, color, dosage, scale lines customizable.
- ✓ Accurate dosage, professional R&D team and data validation support.
- ✓ Currently available in 36/ 37 /50 /60 /74 /75 /80 units, which can be customized for different indications.
- ✓ Applicable to liraglutide, simethicone, follicle stimulating hormone (FSH) drugs, insulin degludec and other drugs.
- ✓ FTO Analysis Completed: Covered China, the U.S., the U.K., and Europe.

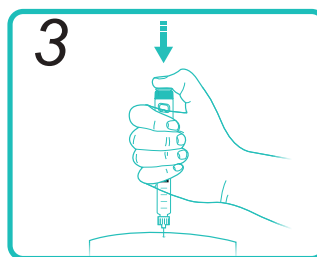
Operating Instructions



Preparation



Dose Adjustment



Injection



Non-refillable: Discard the Entire Pen After Use

Dose Unit

Dose Unit	Cartridge (Min. Dose)
8 Units	3.0 mL (0.01 mL)
	3.0 mL (0.005 mL)
19 Units	3.0 mL (0.01 mL)
30 Units	3.0 mL (0.01 mL)
36 Units	3.0 mL (0.0208 mL)
37 Units	3.0 mL (0.01 mL)
50 Units	3.0 mL (0.01 mL)
60 Units	3.0 mL (0.01 mL)
70 Units	3.0 mL (0.01428 mL)
72 Units	3.0mL (0.01 mL)
74 Units	3.0 mL (0.01 mL)
75 Units	3.0 mL (0.01 mL)
80 Units	3.0 mL (0.01 mL)

Product Parameters

Injection Dose Range	0.005-1.0mL
Auditory Feedback	Auditory Feedback During Dose Adjustment
Viewing Window	Easy to Identify and Use
Injection Start Force	≤10 N for products up to 60 IU
Dose Accuracy	>10 N for products above 60 IU

NEST



Pharmaceutical
company partner



Final Assembly



Tray Packaging



Turnover Box Packaging

01



02



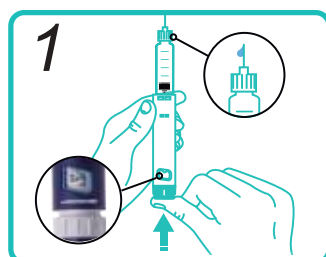
Finish



Self-locking Pen Injector (100 IU)



Operating Instructions



Preparation



Dose Adjustment



Pull Locking Mechanism



Automatically locks after injection;
single-use only.

Product Advantages

- ✓ High Compatibility: Supports a maximum single injection volume of 1 mL, meeting the dosing requirements of multiple medications.
- ✓ Locking Mechanism: Automatically locks after injection for single-use only, ensuring safety and hygiene.
- ✓ FTO Analysis Completed: Covered China, the U.S., the U.K., and Europe.

Product Certifications

China CDE No.B20250000311

Dose Unit

Dose Unit	Cartridge (Min. Dose)
100 Units	3 mL (0.01 mL)

Disposable Fixed-dose Pen Injector



Applications: For human parathyroid hormone-related peptide analogs, such as teriparatide and abaloparatide injections, primarily used in patients with osteoporosis at high risk of fractures.

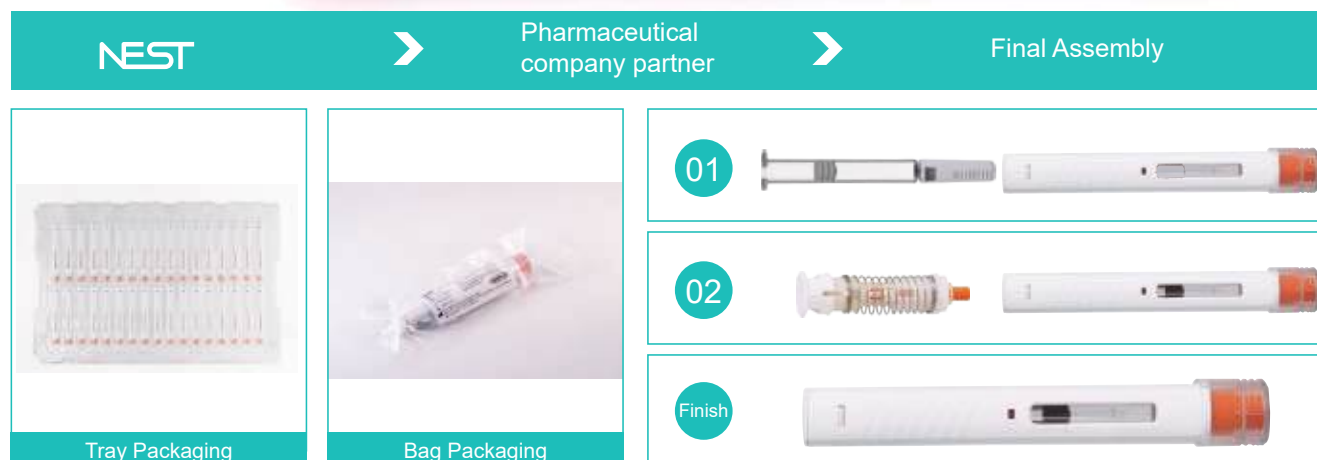
Product Advantages

- ✓ Easy Operation: Tactile and auditory cues; push-button injection allows simple, safe, and reliable use.
- ✓ Accurate Dosing: Fixed injection dose minimizes errors, ensuring precise administration and patient safety.
- ✓ FTO Analysis Completed: Covered China, the U.S., the U.K., and Europe.

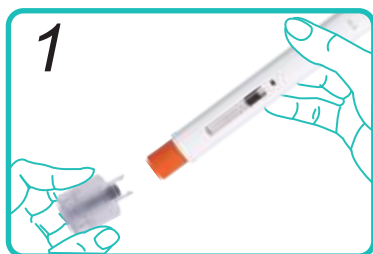
Dose Unit

Dose Unit	Cartridge (Min. Dose)
80 μ L	3.0 mL (80 μ L)
40 μ L	3.0 mL (40 μ L)

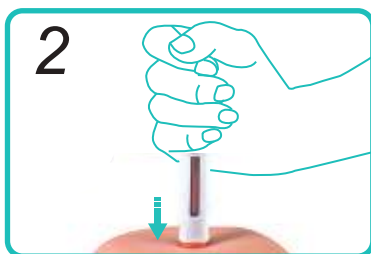
Prefilled Automatic Pen Injector (Two Step)



Two-Step Operation + Automatic Needle Insertion



Remove Pen Cap



Press Injection Site to Activate

Dose Unit

Dose Unit	Cartridge (Min. Dose)
0.5mL	1.0mL Long
1.0mL	1.0mL Long
2.25mL	2.25mL

Product Advantages

- ✓ Two-Step Operation: Simple and easy-to-use injection process.
- ✓ Square Anti-Roll Design: Ergonomic square body prevents accidental rolling.
- ✓ Hidden Needle: Needle remains fully concealed, reducing needle anxiety and improving injection success.
- ✓ Needle Safety Device: Protective cover automatically deploys and locks after injection to prevent needle-stick injuries.
- ✓ Large Viewing Window: Allows clear observation of medication and injection.
- ✓ Visual & Auditory Feedback: Dual cues enhance patient confidence in self-administration.
- ✓ FTO Analysis Completed: Covered China, the U.S., the U.K., and Europe.

Product Parameters

Built-in Container Specifications	1.0mL Long PFS
Filling Volume	0.2-1.0mL
Needle Diameter	29 G TW or Larger
Dose Delivery Efficiency	≥96.5%
Injection Start Force	3-10N
Injection Time	≤10s
Needle Insertion Depth	6mm±2mm
Protective Locking Force	≥60N
Needle Safety Distance	≥4.5mm
Injection Feedback	Visual and Auditory Feedback

Prefilled Automatic Pen Injector (Three Step)

Product Certifications China CDE No.B20250000729



Operating Instructions



Product Advantages

- ✓ Three-Step Operation: Locking mechanism effectively prevents accidental activation.
- ✓ Anti-Roll Design: Pen cap features a standable anti-roll structure for convenient placement.
- ✓ Hidden Needle: Needle remains fully concealed, reducing needle anxiety and improving injection success.
- ✓ Needle Safety Device: Protective cover automatically deploys and locks after injection to prevent needle-stick injuries.
- ✓ Large Viewing Window: Allows clear observation of medication and injection.
- ✓ Visual & Auditory Feedback: Dual cues enhance patient confidence in self-administration.
- ✓ FTO Analysis Completed: Covered China, the U.S., the U.K., and Europe.

Dose Unit

Dose Unit	Cartridge (Min. Dose)
0.5mL	1.0mL Long
1.0mL	1.0mL Long

Product Parameters

Built-in Container Specifications	1.0mL Long PFS
Filling Volume	0.2-1.0mL
Needle Diameter	29 G TW or Larger
Dose Delivery Efficiency	≥96.5%
Injection Start Force	≤30N
Injection Time	≤10s
Needle Insertion Depth	6mm±2mm
Protective Locking Force	≥60N
Needle Safety Distance	≥4.5mm
Injection Feedback	Visual and Auditory Feedback

Pen Injector

Product Certifications

Class II Medical Device Registration Certificate

USA 510(k) No.K240774

Canada MDL Licence

Indonesia Imported Medical Device

Registration Certificate

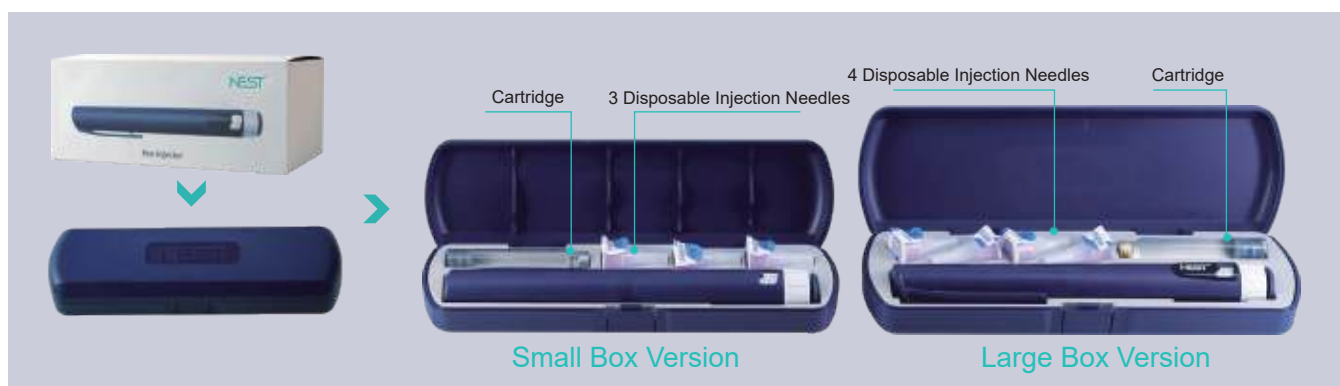
Malaysia Medical Device Registration

Brazil Medical Device Registration

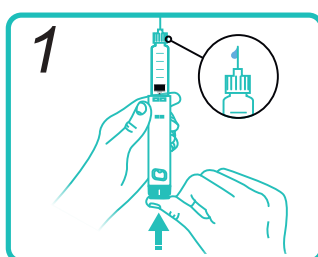
MDSAP Five-Country Certification



Product Packaging



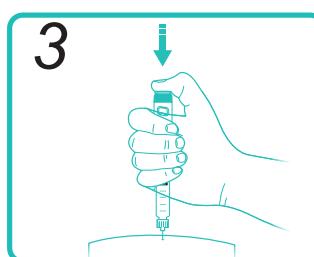
Perating Instructions



Preparation



Dose adjustment



Injection



Cartridge Replaceable, Reusable

Product Advantages

- ✓ Highly customizable: appearance, color, dosage, scale lines customizable.
- ✓ Customizable Dose Range: Minimum unit dose of 0.0075 mL; available in 8/48/50/60/70/75/80 IU, with indication-specific customization.
- ✓ Applicable Drugs: Suitable for long-term injectable therapies such as insulin aspart.
- ✓ FTO Analysis Completed: Covered China, the U.S., the U.K., and Europe.

Dose Unit

Dose Unit	Cartridge (Min. Dose)
8 Units	3.0 mL (0.01 mL)
48 Units	3.0 mL (0.01 mL)
50 Units	3.0 mL (0.01 mL)
60 Units	3.0 mL (0.01 mL)
	3.0 mL (0.0075 mL)
70 Units	3.0 mL (0.01428 mL)
75 Units	3.0 mL (0.01 mL)
80 Units	3.0 mL (0.01 mL)
	3.0 mL (0.0075 mL)
80 Units (Hidden Needle)	3.0 mL (0.0075 mL)

Product Parameters

Injection Dose Range	0.0075-1.0mL
Auditory Feedback	Auditory Feedback During Dose Adjustment
Viewing Window	Easy to Identify and Use
Injection Resistance	<20N

Scan to Complete
the Customization
Form Online



In-house Tooling & Flexible Customization

01

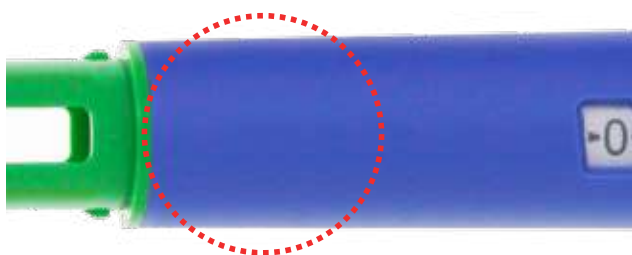
Pen Body Type

**02**

Exterior Color

**03**

Logo Printing

**04**

Dose Units

**05**Graduation
Marks**06**Packaging Options,
etc.

Product Introduction

Commonality

Safety

Flexibility



Produced on an integrated washing and drying line under pharmaceutical-grade clean conditions, suitable for direct filling in pharmaceutical companies, research institutes, and pilot plants.

Product Advantages

- Simplifies the filling process and accelerates drug launch timelines
- Sterilized by moist heat or ethylene oxide
- Delivered sterile to reduce production costs for end users
- Provides high-quality, ready-to-use sterile components that eliminate additional processing steps while fully meeting regulatory expectations, offering a complete container solution
- Enables direct filling for small pharmaceutical companies, research institutes, and pilot plants, aligning with the MAH (Marketing Authorization Holder) system's focus on reducing non-core operations and costs.



Available in multiple packaging formats, including nest and tray configurations for injection vials, cartridges, and prefilled syringes.

Cartridge Assembly for Pen-injectors

Cartridges, as a new-generation parenteral packaging solution, are widely used in pharmaceutical products such as insulin, GLP-1 therapies, hormones, and anesthetics.

Product Certifications

USA DMF No.42439



Operating Instructions



Product Packaging



Product Advantages

- ✓ 100% inline optical inspection ensures excellent appearance quality.
- ✓ EO or steam sterilization, SAL = 10^{-6} , offering flexible sterilization options to meet different requirements.
- ✓ Advanced automated washing and assembly lines with local Class 100 environments, ensuring low particulate levels and regulatory compliance.
- ✓ Nest-pack cartridge packaging prevents contact between cartridges, reducing breakage risk and enhancing product safety.



Description	/Pack /Case	Cat.No.
3.0 mL Cartridge Assembly	100 units per box, 15 boxes per carton	217232

COP Pre-filled Syringe

NEST COP Pre-filled Syringes are in high demand in the pharmaceutical market due to their small size, portability, accurate drug dosage provision, and low risk of contamination. They are widely used as a container of high-value products such as biologics, biochemical products, anti-thrombotic drugs, and beauty products

Serving as alternatives to borosilicate glass, cyclic olefin polymers (COP) offers a high degree of flexibility in design. Its high crack-resistance also reduces logistics and transportation costs. In terms of other physical and chemical properties, COP exhibits high transparency, rigidity, heat resistance, low refractive index, low protein adsorption, and is free from heavy metals and tungsten. Compatibility tests with pharmaceuticals indicate no delamination. And it can be manufactured with low or no silicone content, addressing the limitations of glass pre-filled syringes.

NEST COP Pre-filled Syringe is designed to meet your ever-changing needs. We offer comprehensive process services, which include design, production, and pre-sterilization, to provide you with the perfect solution.

Features

- Excellent drug stability, low protein adsorption, and barrier properties against water vapor and oxygen permeation.
- Eliminates the need for drug reconstitution before injection, reducing the risk of drug contamination.
- Accurate drug composition, avoiding changes in drug proportions during on-site drug preparation.
- Luer Connector, in line with the International Standard, is included to ensure secure connections and achieve excellent sealing performance. This reduces drug leakage and prevents the risk of needle rotation and popping during injection.
- COP offers a high degree of design flexibility and allows for greater customization.
- Compatible with various sterilization methods, such as ethylene oxide sterilization and steam sterilization.
- Complies with ISO 9001, ISO 15378, YBB, and USP Class VI standards.

Product Certifications

- ▶ CDE: B20230000509
- ▶ DMF No.40745

Advantages of COP material compared to other materials.

Features	COP	Glass	PP
Gas permeability (O ₂ , N ₂ , CO ₂)	M	G	M
Water vapor permeability	G	G	M
Transparency after steam sterilization	G	G	P
Transparency after EP sterilization	G	G	P
Transparency after gamma ray sterilization	G	G	P
Drug pH change	G	P	G
Brittleness	G	P	G
Precision Molding/processing type	G	P	G
Waste characteristics/combustion characteristics	G	P	G
High purity	G	G	M



10x10 Nested Configuration



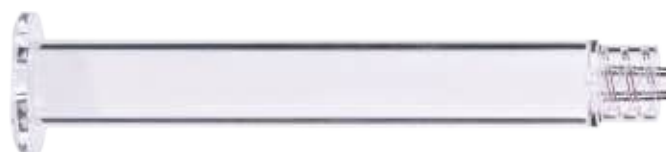
- The specification for pre-sterilized wash-free and sterilization-free NEST Pre-filled Disposable Glass Intranasal Atomization Device is now available. They are produced in a cleanroom that adheres to GMP management standards, from injection molding to final packaging.
- State-of-the-art automated production process is adopted to ensure minimal tolerance and stable quality of the barrel.
- Provide data reports on extractable and biocompatibility studies.

Rubber Stopper & Luer Cap



Made of butyl rubber bromide and compliant with European Pharmacopoeia, United States Pharmacopoeia, and Japanese Pharmacopoeia.

Product	Material	Rubber Stopper Formulation	Color
Rubber Stopper	Butyl Bromide	HS264	Black
Luer Cap	Butyl Bromide	HM174	Gray



Assembly Unit

Specifications	/Pack	/Case	Cat.No.
1.0 mL	100	15	205612
1.0mL Long	100	16	205602
2.25 mL	100	15	205622

Plunger (Double-layer Packaging, Non-sterile)



Specifications	/Pack	/Case
1.0 mL	5000	1
1.0mL Long	5000	1
2.25 mL	5000	1

Finger Flange (Double-layer Packaging, Non-sterile)



Specifications	/Pack	/Case
1.0 mL	10000	15
1.0mL Long	10000	16
2.25 mL	10000	15



CDE:B20230000050

Pre-filled Disposable Glass Intranasal Atomization Device

Micro-level atomized

Fine particles for easy absorption

TMedication can be atomized into fine mist particles ranging from 10-70 μm in diameter.

CDE Number: B20230000050
(Activated and transferred to A)

Patents:
CN116077816B
US12311389B2
EP23861667.6

Upper
respiratory tract

Trachea

Lower respiratory tract
Bronchus
Alveoli

NEST Disposable Pre-filled Glass Intranasal Atomization Device is a pharmaceutical packaging designed to effectively store drugs for extended periods of time while maintaining stability and compatibility. A Spray Nozzle is included to convert liquid medication into uniformly sized mist particles, which are then sprayed onto the patient's mucous membranes (such as nasal or oral mucosa) for efficient drug administration.

The liquid medication can be pre-filled into the syringe and sealed for storage and transportation. This eliminates the need to transfer the liquid medicine to a syringe before use, reducing workload. It also addresses the issues of dosage loss and waste caused by residue. Additionally, pre-filling enhances safety and hygiene by minimizing the risk of contamination during the transfer process.



Features

• Stable Material

Made of high quality medium borosilicate glass, which is extensively applied in pharmaceutical packaging including biological agents and vaccines, the product possesses strong chemical durability and shock resistance.

• Hermetically Sealed

The spray is equipped with a protection cap, which is embedded with sealing ring to ensure its leak-proofness and virus-resistance during transfer and transportation.

• Perfect Atomization Effect

Atomization cavity with precision turbine design ensures uniformly atomized particles evenly distributed on human mucous membrane for ideal liquid atomization effect.

• Precise Dose

The precise Dose Limiter ensures the uniformity of each dose .

• Single Use Design

The device is set with self-destruct design. After administration, the stopper will stick in the syringe and can't be taken out for a second use.

Application

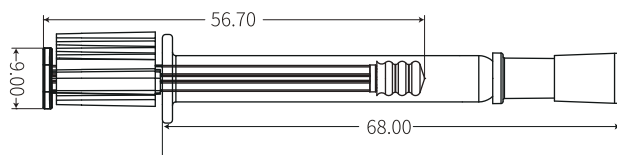
Intranasal medication, administered through absorption in the mucous membrane, is an efficient treatment method. The nasal mucosa is moist and smooth with rich blood vessels, making it an ideal route for intranasal medication. This device is designed for intranasal delivery of medication to achieve the effects of reducing inflammation, stopping bleeding, fighting bacteria, and relieving nasal congestion. The medication will then be absorbed into the blood vessels and distributed throughout the body. For example, if antipyretic analgesics like Analginum are delivered nasally in droplets, they can help reduce fever.

Compared to intravenous drug delivery and other modes of administration, intranasal medication offers several advantages. Firstly, the activity of nasal mucosal hydrolase is lower than in the gastrointestinal tract, reducing the degradation of polymer compounds like polypeptides, hormones, vaccines, etc., thus ensuring the effectiveness of the drugs. Secondly, it bypasses the "first-pass effect" in the liver and reduces the potential liver damage caused by oral drugs. Thirdly, it has high bioavailability, allowing for targeted drug delivery to the brain. Finally, it is easy to administer and convenient for infants and children, with minimal adverse reactions and good compliance.

In recent years, nasal spray vaccines have gained attention as a new area of research and application, thanks to the specific advantages of intranasal administration. Research has shown that nasal mucosal immunity can induce both local and systemic immune responses. Its effects is comparable to intravenous injection and can even be more effective and intense than oral administration. Therefore, nasal spray vaccines broaden the possibilities of intranasal administration.

Order information

Specifications	Description	Packaging		Cat.No.
0.5 mL	①Assembling Unit	160pcs/rk	2400 pcs/cs	205101
	② Plunger	10000pcs/pk	10000 pcs/cs	/
	③Dose Limiter	5000pcs/pk	10000 pcs/cs	/



10x10 Nested Configuration



- The specification for pre-sterilized wash-free and sterilization-free NEST Disposable Pre-filled Glass Intranasal Atomization Device is now available. From injection molding to final packaging, they are produced in a cleanroom that adheres to GMP management standards.
- Provide data reports on extractable and biocompatibility studies.

ACCUREVIAL®

AccureVial® COP Bottle



Introduction

The main raw material for NEST AccureVial™ COP Bottle is cyclic olefin polymer (COP). As a substitute for borosilicate glass, COP has the characteristics of high transparency, high rigidity, high heat resistance, low refractive index, low protein adsorption, and drug compatibility test producing no flake. The bottle body can withstand temperatures ranging from 121 °C to -80 °C.

NEST AccureVial™ COP Bottle is featured with good steam tightness and resistance against acid, alkali and abrasion. This product is sterilized by electron beam and can be directly used for prefilling of injection solution, freeze-dried powder and other kinds of drugs and easy to be stored and transported.

Features

- Excellent drug stability, resistance to high and low pH values (without delamination), low protein adsorption
- Good barrier properties against water vapor and oxygen permeation
- High crack resistance reduces transportation costs
- Does not release heavy metal ions or produce delamination
- Excellent temperature resistance: from 121 to -196°C (vapor-phase liquid nitrogen)
- COP material enables various specifications, providing more flexible customization services.
- Reports on extractables and biocompatibility testing are available
- Complies with ISO 9001, ISO 15378, YBB standards

Nested configuration

- The specification for pre-sterilized wash-free and sterilization-free NEST AccureVial®COP bottles is now available. These bottles are produced in a cleanroom that adheres to GMP management standards, from injection molding to final packaging.
- Compatible with various sterilization methods, including ethylene oxide and steam sterilization.



Description	Volume(mL)	/Pack	/Case	Cat.No.
2R	2mL	100	1500	207212
6R	5mL	48	720	207012

Description	/Pack	/Case	Cat.No.
2R rubber stopper	1	8000	207232
6R rubber stopper	1	2500	207032
2R Aluminum cap	1	4000	207222
6R Aluminum cap	1	2000	207042



Medical Consumables

Disposable Intranasal Atomization Device

Product Presentation

- The device provides a painless and rapid absorption medication delivery option for non-invasive intranasal medication delivery. It improves safety for both caregivers and patients by avoiding needle-sticking injuries.
- It is an atomizing device for drug administration intended to convert liquid preparations into atomized particles and spray on the surface of human body tissues (or organs) for full contact to maximize the administration effect. Meanwhile, the reasonable and effective self-destructive structure ensures that the product can only be used once to provide users with safe and hygienic products.





Rapid Absorption



Non-invasive & Painless



Self-Destruct Device



Precision Inoculation



Dose Limiter



Scan the QR code to watch the instruction video.

Micro-level atomized

Fine particles for easy absorption

The Spray Nozzle can atomize liquid medication into fine mist particles ranging from 10-70 μ m in diameter.

Patent Number: CN116077816B



Components and Key Features



Syringe

It comes with clear surface scale. The plunger self-destructs after use due to the built-in self-destruct design, ensuring one-time use and preventing reuse.

Spray Nozzle

The Spray Nozzle micronizes the medication to facilitate rapid absorption. Additionally, the spray is generated in an umbrella shape, minimizing any potential harm or irritation to the human body.

Dose Limiter

The Dose Limiter, in a swallowtail clip shape, is easy to install and disassemble.

Advantages of nasal mucosal administration

After the influenza virus invades the human body, it is commonly found in the nasal cavity, respiratory tract mucosa, body fluids, and cells. The intranasally delivered nasal spray influenza attenuated live vaccine can rapidly stimulate the human body's triple immune response and offer protection against viruses in different regions.

Success Story - Influenza Vaccine, Live Nasal, Freeze-dried



Triple immune response = mucosal immunity + humoral immunity + cellular immunity

Order Information

Color	Pcs/cs	Cat.No.
White	1000	201302

Nasal mucosal administration stimulates the production of mucosal immunity, specifically IgA antibodies, which provide the initial defense against pathogens in the nasal cavity.

Additionally, it induces the production of humoral immunity, specifically IgG antibodies, which help eliminate influenza viruses in body fluids.

Furthermore, it triggers the production of cellular immunity, specifically T cells, which are responsible for eliminating influenza viruses within cells.

Saliva Collection Kits



203101



203102



203111



203112



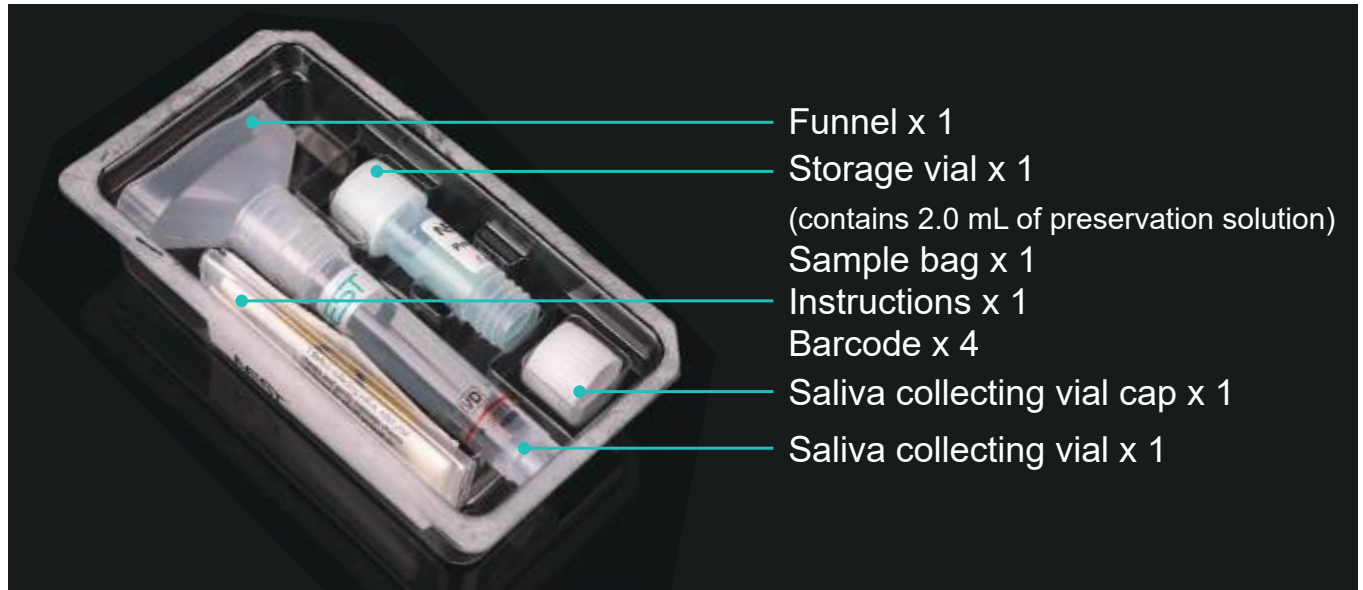
203901

Features

- USP VI Polypropylene Tubes.
- Collection process is painless and safe.
- The humanized design of funnel conforms to the mouth shape of human, making the collection process simple and easy.
- Good sealing performance effectively prevents leakage and specimens contamination safely and reliably, making it easy to preserve and transport specimen.
- The bottom of the collecting vial is conical, making it easy to process concentrated sample.
- Bar codes makes digital management easier, and labels with writing areas are convenient for users to record information.
- RNase/DNase free, non-pyrogenic.

Volume (mL)	Upper Cup	Sterile	Contents	/Pack	/Case	Cat.No.
5 mL	Screw Funnel	Sterile	Screw Funnel+5 mL Vial+SpecimenBag+Cap	1	100	203101
10 mL	Screw Funnel	Sterile	Screw Funnel+10 mL Vial+SpecimenBag+Cap	1	100	203102
5 mL	Wedged Funnel	Sterile	Wedged Funnel+5 mL Vial+SpecimenBag+Cap	1	100	203111
10 mL	Wedged Funnel	Sterile	Wedged Funnel+10 mL Vial+SpecimenBag+Cap	1	100	203112
Wedged in Funnels		Sterile	Compatible with different tube diameters ranging from 9.5-20.0 mm	1	100	203901

Dry Saliva Collection Kits



- Funnel x 1
- Storage vial x 1
(contains 2.0 mL of preservation solution)
- Sample bag x 1
- Instructions x 1
- Barcode x 4
- Saliva collecting vial cap x 1
- Saliva collecting vial x 1

Features

- Applied at room temperature.
- The 5 mL preservation solution vial is filled with 2 mL ITM solution.
- Samples can be stored and transported at room temperature.
- DNA samples can be stored stably for 12 months.
- RNA samples can be stored steadily for 1 month.
- With good antibacterial performance and strong storage stability, the preservation solution can guarantee the integrity of viral nucleic acids in the sample if it is used to store inactivated viral samples.

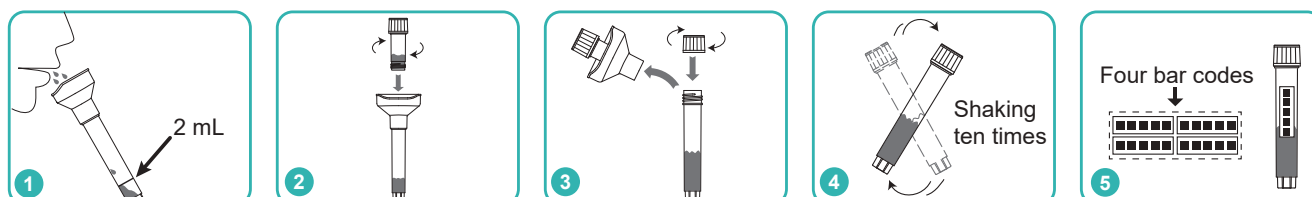
Introduction

- The product is used to collect high-quality DNA/RNA samples in the saliva.
- The collection process is painless and won't cause any injury or discomfort to the human body.
- The collected samples can be used for various biological experiments such as enzymatic hydrolysis, PCR and next-generation sequencing and are widely used in the collection and preservation of specimens in hospitals, scientific research institutions and households.

Introduction

- The cap of the Preservation Solution Tube should always be securely fastened to prevent accidental ingestion.
- The delicate design allows the preservation solution automatically to flow into the storage vial, eliminating direct contact with the preservation solution at all stages.
- The ITM Inactivation Preservation Solution, which deactivates viruses while preventing nucleic acid degradation, effectively prevents accidental contact or infection during transportation and testing.
- The device can be conveniently stored or transported at room temperature.
- It ensures a comfortable collection process without causing pain or damage to the human body. It is particularly suitable for children and patients who cannot provide a blood sample.

Instructions



Take a barcode out and stick it on the saliva collection tube. Then place the tube with the attached barcode and two additional barcodes into the sample bag for later storage, transportation or testing. The user should retain the remaining barcode for future reference or feedback.

Description	/Pack	/Case	Cat.No.
Saliva Collection Kit with ITM, each kit Includes a 10 mL Vial with a funnel, a separate 5 mL Vial filled with 2.0 mL ITM, Sterile, 100 kits/case	1	100	203011

Saliva/gargle Collection Kit



Features

- Applied at normal ambient temperature.
- The kit process is simple, convenient and easy to operate.
- Flexible to use, can be easily collected in the laboratory, clinic, or even at home.
- It is suitable for a wide range of target group, especially for children and patients who do not meet the blood sample collection conditions.
- The non-invasive collection of samples will not cause any discomfort to the collection objects, reducing the chance of infection and improving safety.

Introduction

The disposable sampler saliva/gargle collection kit is intended for the collection and transport of clinical samples from the collection site to the testing laboratory. As it will not cause any discomfort to the collection object, it is easy to be accepted. Both saliva and gargling method will be presented in this IFU either method is at your choice. This product is easy to carry and operate.

Description	Packing	/Pack	/Case	Cat.No.
Saliva/Gargle Collection Kit, each kit Includes a funnel, an empty 5mL vial with cap, a 5 mL Vial Filled with 4.0 mL saline, Sterile	Paper Box Package	1	100	203051
	PE Bag Package	1	100	203061
	Blister Package	1	100	203071

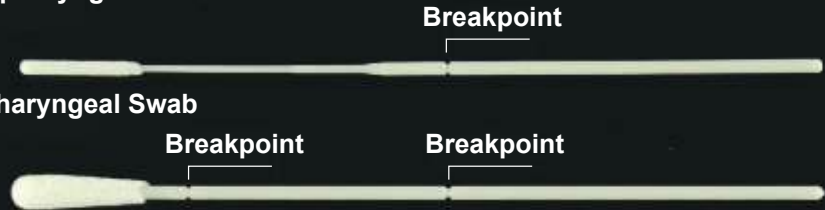
Disposable Swab



Registration Certification of Class II
Medical Devices Registration
No. : 20212221578.

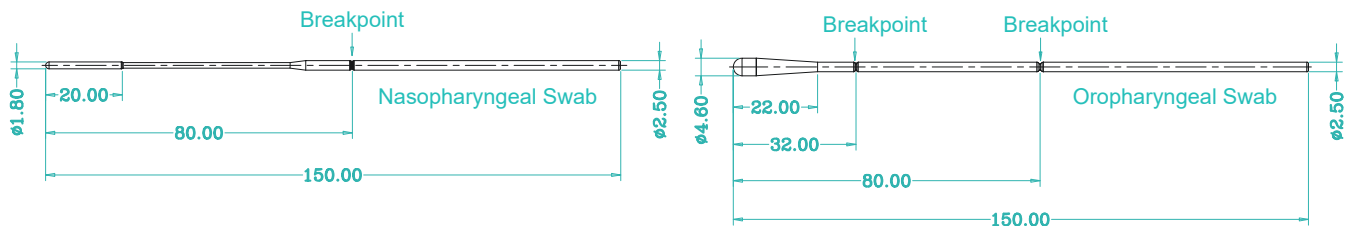
Nasopharyngeal Swab

Oropharyngeal Swab



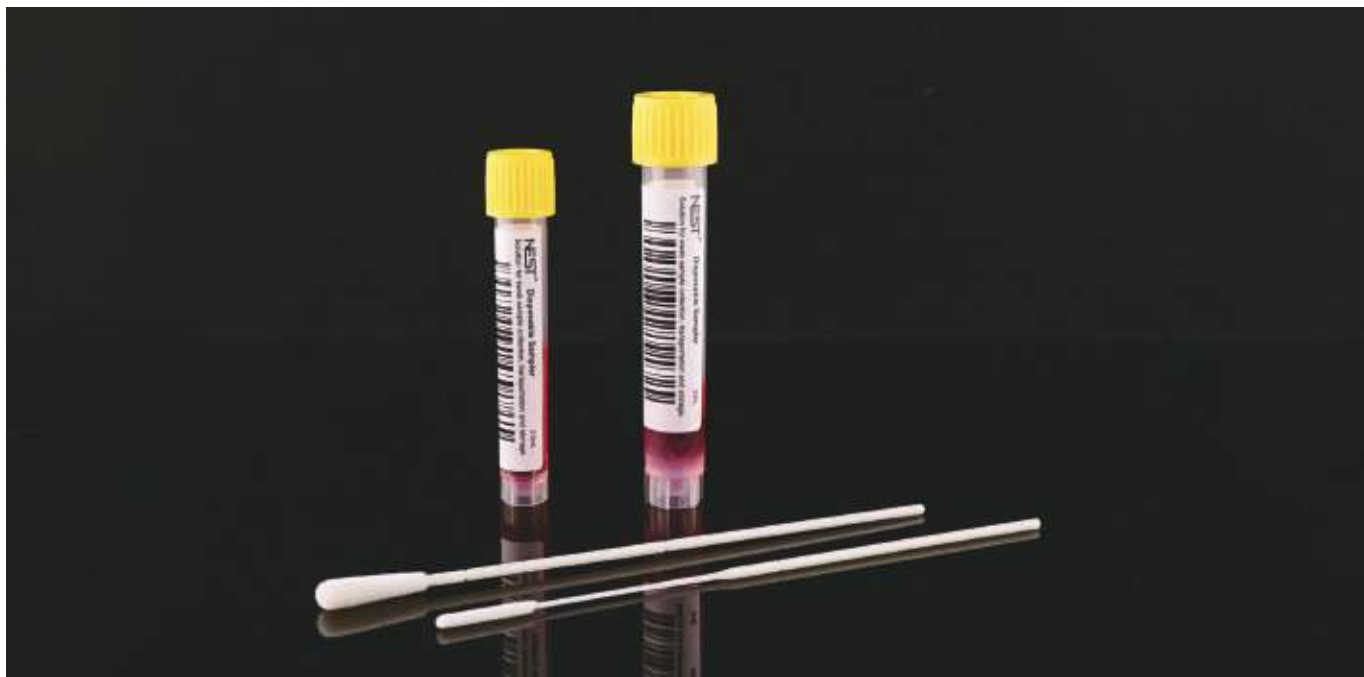
ADVANTAGE:

- Swab head is flocked nylon, and swab shaft is made of ABS (Acrylonitrile butadiene styrene).
- Endotoxin-free.
- Individually wrapped and sterile.
- CE, FDA, ISO certified.



Cat.No.	Descriptions	/Pack	/Case
202003	Oropharyngeal Specimen Collection Swab, Individually Wrapped, Sterile	100	5000
202004	Nasopharyngeal Specimen Collection Swab, Individually Wrapped, Sterile	100	5000

Viral Transport Medium / Inactivation Transport Medium



Viral Transport Medium

- Used for collection, storage and transportation of human nasopharyngeal virus samples.
- Unused VTM medium can be transported at room temperature.
- Sample transport temperature requirement & storage time: 2 to 4 C°, 48 h.

Cat.No.	Description	/Pack	/Case
202016	Disposable Sampler, 10 mL Vial with 3 mL VTM, with Individually Wrapped and Sterile Oropharyngeal Swabs, 1 Vial + 1 Oral Swab/pk, 100 pk/cs	1	100
202017	Disposable Sampler, 10 mL Vial with 3 mL VTM, with Individually Wrapped and Sterile Nasopharyngeal Swabs, 1 Vial + 1 NP Swab/pk, 100 pk/cs	1	100
202115	Disposable Sampler, 5 mL Vial with 2.5 mL VTM, 10 Vials/pk, 100 Vials/cs	10	100
202117	Disposable Sampler, 10 mL Vial with 3 mL VTM, 10 Vials/pk, 100 Vials/cs	10	100

Inactivation Transport Medium

- ITM medium serves to both inactivate viruses and prevent nucleic acid degradation.
- Room temperature transport.
- Samples can be stored at room temperature for 20 days.
- Used for collection, storage and transportation of viruses, chlamydia, mycoplasma and urea plasma.

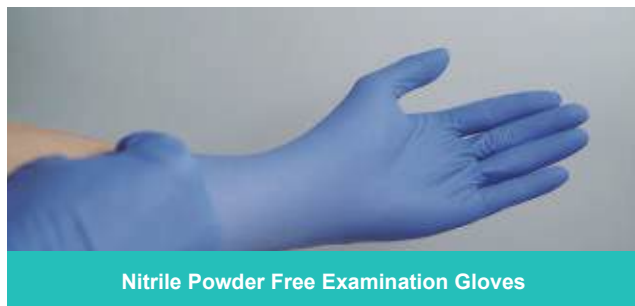
Cat.No.	Description	/Pack	/Case
202001	Disposable Sampler, 5 mL Vial with 2 mL ITM, with Individually Wrapped and Sterile Oropharyngeal Swab, 10 Vials/pk, 50 Vials + 50 Swabs/cs	10	50
202005	Disposable Sampler, 5 mL Vial with 2 mL ITM, with Individually Wrapped and Sterile Nasopharyngeal Swabs, 10 Vials/pk, 50 Vials + 50 Swabs/cs	10	50
202006	Disposable Sampler, 10 mL Vial with 3 mL ITM, with Individually Wrapped and Sterile Oropharyngeal Swabs, 1 Vial + 1 Oral Swab/pk, 100 pk/cs	1	100
202007	Disposable Sampler, 10 mL Vial with 3 mL ITM, with Individually Wrapped and Sterile Nasopharyngeal Swabs, 1 Vial + 1 NP Swab/pk, 100 pk/cs	1	100

Other preservation solutions such as UTM, AMIES, and STM are available, and the packaging specifications are customizable.



Lab Safety & Lab Instrument

Nitrile Examination Glove



Nitrile Powder Free Examination Gloves



Colloidal Oatmeal Coated Nitrile Gloves

Feature

- Made of nitrile, an alternative solution for people allergic to natural latex.
- Suitable for both left and right hand.
- Tensile Strength: Minimum 18.0 MPa (Before Aging).
- Rolled cuff design makes it easy to wear and prevents rollback.
- Textured fingertips increase friction for better gripping.
- Powder-free.
- Non-Sterile. Single use only, powder free.
- Boxed pull-out packaging.
- Made in Malaysia.
- Powder-free nitrile gloves weigh 3.5 grams.

Colloidal Oatmeal Coated Nitrile Glove

Oats Extractions

Oats extractions is a patented coating recognized by the FDA as a skin protectant, which have been proven by clinical studies could reduce and control rash and dry skin symptoms. Clinical studies have shown that colloidal oatmeal could reduce and control rash, dry skin.



Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case	Cat. No.
S	84	≥230	100	1000	903011
M	94		100	1000	903021

Nitrile Powder Free Examination Glove



Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case	Cat. No.
XS	76	≥230	100	1000	902001
S	86		100	1000	902011
M	98		100	1000	902021
L	107		100	1000	902031
XL	115		100	1000	902041

Latex Powder Free Examination Glove

Feature

- Made of synthetic latex.
- Suitable for both left and right hand.
- Tensile Strength: Minimum 18.0 MPa (Before Aging).
- Rolled cuff design makes it easy to wear and prevents rollback.
- Textured fingertips increase friction for better gripping.
- Powder-free.
- Non-Sterile. Single use only, powder free.
- Boxed pull-out packaging.
- Made in Malaysia.
- Powder-free latex gloves weigh 5.5 grams.



Cat.No.	Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case
901001	XS	76	≥230	100	1000
901011	S	86		100	1000
901021	M	98		100	1000
901031	L	107		100	1000
901041	XL	115		100	1000

Nonwoven Mask



Features

- Can filter some toxic and harmful substances, odor gases, dust, etc. in the air.
- Bendable nose clip to ensure a better fit between the mask and the face.
- Foldable, easy to store, light weight, easy to carry.
- The four-layer activated carbon protection mask is made of activated carbon fiber of high adsorption, which is more effective in filtering than the ones protection mask without activated carbon fiber.

Cat.No.	Name	Size (±0.5cm)	Color	/Pack	/Case
922001	Three-layer PP Non-woven Lab Protection Mask	17.5 x 9	Blue	50	500
922101	Four-layer PP Activated Carbon Non-woven Lab Protection Mask	17.8 x 9.3	Dark Gray	50	500

Mushroom Cap



Features

- Breathable, dustproof, able to block dust and microorganisms.
- Not feeling tight for long-time wearing, no allergic reaction.

Cat. No.	Name	/Pack	/Case
921001	Blue Mushroom Cap	100	1,000

Non-woven Shoe Cover



Features

- Breathable, non-slip, with rubber bands, comfortable to wear.

Cat. No.	Size(cm)	/Pack	/Case
923001	42 * 17	100	1,000

Centrifuge

Feature

- Electronic locks. Centrifugation only when the lid is locked.
- The lid opens automatically after centrifugation.
- Fast Lifting Speed, the electronic brake.
- Low Noise.
- Capacitive touchpad, responsive.
- LCD display. Real-time display of speed, time and operating status.
- Centrifugal time and speed adjustable. Adjustable speed during centrifugation.
- Size: 260*220*150mm.
- Voltage: 110-220V, 50-60HZ.

Type	Name	Centrifuge Range (RPM)	Max RCF (g)	Rotor
102001	Universal Centrifuge	500-6,000	2,400	General Rotor (1.2/05/1.5/5.0ml)
102002	5 mL Centrifuge	500-6,000	2,400	For 5 mL Centrifuge Tubes
102101	High - Speed Centrifuge	500-12,000	8,800	For 1.5 mL & 2.0 mL Centrifuge Tubes



General Rotor



5 mL Centrifuge

High - Speed
Centrifuge

Mini Dry Bath

Feature

- Manual mode & automatic mode.
- Fast heating, with overheat protection switch to prevent overheating.
- Display setting parameters and real-time parameters simultaneously, easy to observe and use.

Range of Application	0.2/0.5/1.5/2.0ml Centrifuge tube
Temperature Range	Indoor temperature-100 °C
Time set	1-999min or 1-999sec
Temperature control accuracy	±0.1 °C
Temperature uniformity	±0.3 °C
Heating up time	About 5min
Touch screen	Capacitive touch screen
Display	LCD
Voltage	100-220V , 50-60HZ
Size	157*115*100mm (L*W*H)
Weight	About 0.5kg



7° Digital Nutating Mixer

Features

- The adjustable and gentle motion is ideal for many staining applications;
- Includes a large platform and non-slip mat;
- Low voltage power supply provides safe cold room operation and low energy consumption;
- Continuous or timed operation with automatic switch-off;
- Continue to run by last set speed and the remaining time when the power recovers;
- Audible and visual alarm: In timed mode, alarm will sound 5 times and then the time window shows "End" and flicker 5 times when the time reaches zero.

Cat. No.	105005
Speed	2~80rpm
Speed Accuracy	1rpm
Tilt Angle	7°
Timer	0~99h59min
Platform Dimensions	307x297mm
Max. Load	0.8kg
Display	LED
Included Accessory Standard in Packaging	6 Rubber Strips
Ambient Temperature	5~40 C
Relative Humidity	≤80%
Power Supply	AC100~240V, 50 / 60Hz
Max. Power	6.5W
Dimensions	440(L)x296(W)x189(H)mm
Net Weight	7.3kgs
Protection Level	IP21



Rubber Strip

Mini Vortex Mixer

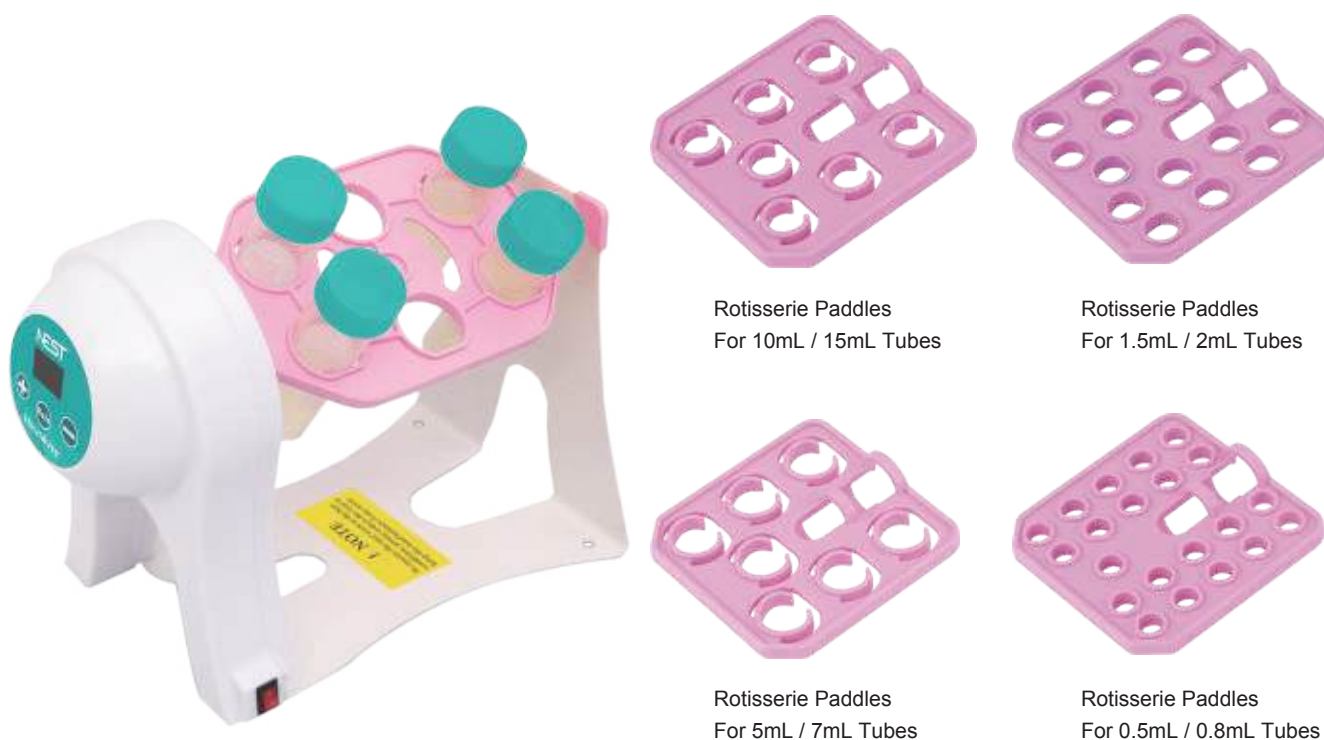
Features

- Extremely compact and easy operate;
- Powerful vortex for tubes up to 30mm;
- Head is made of durable material to ensure long life;
- Refined steel base is designed to ensure product stability.

Cat. No.	105003
Oscillation Mode	Circumference Oscillation
Orbital Diameter	Φ4.5mm
Max. Capacity	80mL
Max. Tube Diameter	Φ30mm
Speed	3000rpm
IP rating (DIN EN 60529)	IP40
Ambient Temp.	5~40 C
Outside Dimensions	Φ96xH85mm
Power	5W
Power Supply	AC100~240V, 50/60Hz
Weight	0.55kg



Variable Speed Tube Revolver with Digital Display



Features

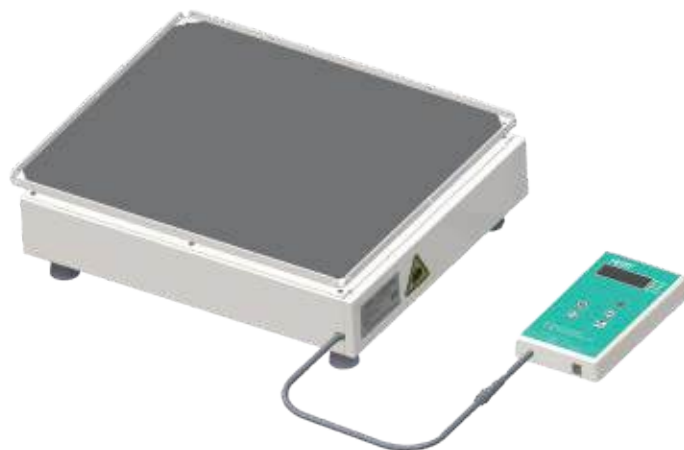
- Small footprint, "Plug and Play" operation;
- Includes five different interchangeable rotisseries;
- Rotation direction can be changed by slightly touching the rotisseries;
- Paddle angle is adjustable for different purposes;
- High quality, maintenance-free motor with little noise.



Rotisserie Paddles
For 50mL Tubes

Cat. No.	105004
Rotation Speed	10~40rpm
Capacity	84x0.5mL tubes, 60x1.5mL / 2.0mL tubes, 28x5mL / 7mL tubes, 24x10mL tubes, 6x50mL tubes
Holder for Tubes Standard Configuration	Rotisserie Paddles for 10mL / 15mL Tubes 2pcs Rotisserie Paddles for 5mL / 7mL Tubes 2pcs Rotisserie Paddles for 1.5mL / 2mL Tubes 2pcs Rotisserie Paddles for 0.5mL / 0.8mL Tubes 2pcs Rotisserie Paddles for 50mL Tubes 1pcs
Ambient	4~60 C
Outside Dimensions	260(W)x148(D)x195mm(H)
Power	10W
Power Supply	AC100V~240V 50Hz/60Hz
Weight	1kg

CO₂ Orbital Shaker



Features

- Orbital shaking through magnetic power eliminates the need to replace belts;
- Small footprint ideal for use in a CO₂ incubator;
- Specially treated mechanical components protect up to 20% CO₂ and 95% humidity conditions;
- Convenient external control box with LED display allows for easy adjustments without opening the chamber door;
- Minimal heat dissipation assures conditions within the CO₂ chamber are not effected;
- CO₂ resistant shaker can be used outside of CO₂ incubator for maximum value.

Cat. No.	105008 (No Accessories) / 105009 (Contains Accessories)
Speed Range	30rpm~300rpm
Timer	0~99h59min (0, continuous)
Orbit Diameter	Φ19mm
Platform Dimensions	355mmx300mm
Max.Capacity	50mL x30 / 100mL x15 / 150mL x15 / 200mL x15 / 250mL x15 500mL x9 / 1000mL x6 / 2000mL x4 / 3000mL x2 / 5000mL x1
Display	LED
Max.Load	6kgs
Ambient	Temp.: 5 ~ 60 Humidity: <99%RH
Outside Dimensions (WxDxH)	Machine Body: 360 x 300 x 96mm Control Box: 360 x 105 x 75mm The Unit: 360 x 405 x 96mm
Power	30W
Power Supply	AC100~240V, 50Hz/60Hz
Weight	Machine Body :17.5kgs Control box: 1kg

Flask clamp feature

Made of polished stainless steel. They can be fixed on any platform of all models of incubator shakers.



Cat.No.	CO ₂ Orbital Shaker Accessory package
105901 ▲	100mL Flask Clamp * 2 250mL Flask Clamp * 4 500mL Flask Clamp * 4 1000mL Flask Clamp * 2 2000mL Flask Clamp * 2 Aluminum Platform * 1
105908 ▲	25mL Flask Clamp
105909 ▲	50mL Flask Clamp
105902 ▲	100mL Flask Clamp
105903 ▲	250mL Flask Clamp
105904 ▲	500mL Flask Clamp
105905 ▲	1000mL Flask Clamp
105906 ▲	2000mL Flask Clamp
105907 ▲	Aluminum Platform 300mm*360mm

▲ Make to Order

Standard Mini Roller



Standard Mini Roller (6 Rollers)



Control Box

Standard Mini Roller (11 Rollers)

Features

- Variable speed to accommodate numerous applications.
- Anti-corrosive and wear-resistant construction for use in humid and CO₂ environments.
- Remote control box makes it easy to operate the unit while it is in an incubator.

Product Name	Standard Mini Roller (11 Rollers)	Standard Mini Roller (6 Rollers)
Cat. No.	105007	105006
Included Accessory Standard in Packaging	Rollers: 11 O Ring (23.5x3.6mm): 20 O Ring (13.2x2.7mm): 20	Rollers: 6 O Ring (23.5x3.6mm): 20 O Ring (13.2x2.7mm): 20
Roller Speed	0.5~80rpm	0.5~80rpm
Operating Mode	Way forward	Way forward
Roller Dimensions (DXL)	Φ28mmx259mm	Φ28mmx259mm
Available Tubes or Bottles	Max. Ø120mm bottles; tubes	Max. Ø120mm bottles; tubes
Positions	Centrifuge tubes can be placed randomly or three 1500ml standard bottles	Centrifuge tubes can be placed randomly or three 1500ml standard bottles
Max.Load	6.5kgs	6.5kgs
Ambient	5℃~60℃	5℃~60℃
Relative Humidity	≤95%	≤95%
Display	LED	LED
Timer (Control Box)	999min or continuous	/
Outside Dimensions (WxDxH)	378mmx360mmx72mm	378mmx360mmx72mm
Power	10w	10W
Power Supply	AC100~240V,50/60Hz	AC100~240V,50/60Hz
Weight	6.5kgs	6.5kgs

Pipette

Features

- Available as Fixed Volume and Adjustable Volume formats.
- Streamlined shape design.
- Comprehensive volume range from 0.1 µL to 10mL.
- Easy calibration and maintenance.
- 8 and 12 channel pipette options.
- Dispensing head rotates for effortless pipetting convenience.
- Individual piston and tip cone assembly.
- Spring loaded tip cones for easy cleaning and maintenance.
- Compound material-made tip cone secures high sealing performance.

Mechanical Pipette Volume Selection

Specifications

This volume list is for MicroPette and MicroPette plus (Adjustable and Fixed volume)

Single-channel Adjustable Volume Pipettes							
Cat.No.	Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
				Systematic Error		Random Error	
	µL	µL	µL	µL	%	µL	%
104011	0.1-2.5	0.05	2.5	±0.0625	±2.50	±0.05	± 2.00
			1.25	±0.0375	±3.00	±0.0375	± 3.00
			0.25	±0.03	±12.00	±0.015	± 6.00
104012	0.5-10	0.1	10	±0.1	±1.00	±0.08	± 0.80
			5	±0.075	±1.50	±0.075	± 1.50
			1	±0.025	±2.50	±0.015	± 1.50
104013	2-20	0.5	20	±0.18	±0.09	±0.08	± 0.04
			10	±0.12	±1.20	±0.1	± 1.00
			2	±0.06	±3.00	±0.04	± 2.00
104014	5-50	0.5	50	±0.3	±0.60	±0.15	± 0.30
			25	±0.225	±0.90	±0.15	± 0.60
			5	±0.1	±2.00	±0.1	± 2.00
104015	10-100	1	100	±0.8	±0.80	±0.15	± 0.15
			50	±0.5	±1.00	±0.2	± 0.40
			10	±0.3	±3.00	±0.15	± 1.50
104016	20-200	1	200	±1.2	±0.60	±0.3	± 0.15
			100	±0.8	±0.80	±0.3	± 0.30
			20	±0.6	±3.00	±0.2	± 1.00
104017	100-1000	5	1000	±6	±0.60	±2	± 0.20
			500	±3.5	±0.70	±1.25	± 0.25
			100	±2	±2.00	±0.7	± 0.70

**121°C
FULLY
Autoclavable**

Push button
(thumb button)

Grip cover

Tip ejector

Tip ejector collar

Common Chemical Compatibility Chart for Plastics

	ETFE	FEP/TFE /PFA	FLPE	FLPP	HDPE	LDPE	PC	PETG	PP	PVC	TPE***
Dilute or Weak Acids	E	E	E	E	E	E	E	G	E	E	G
Strong or Concentrated Acids **	E	E	G	G	G	G	G	N	G	G	F
Aliphatic Alcohols	E	E	E	E	E	E	G	G	E	G	E
Aldehydes	E	E	G	G	G	G	G	G	G	G	G
Bases / Strong Bases	E	E	F	E	E	E	N	N	E	E	F
Esters	G	E	G	G	G	G	N	G	G	N	N
Aliphatic Hydrocarbons	E	E	E	G	G	F	G	G	G	G	E
Aromatic Hydrocarbons	G	E	E	N	N	N	N	N	N	N	N
Halogenated Hydrocarbons	G	E	G	F	N	N	N	N	N	N	F
Aromatic Ketones	G	E	G	G	N	N	N	N	N	F	N
Strong Oxidizing Agents	E	E	F	F	F	F	F	F	F	G	N

Tips: This chart does not apply to chemically resistant tubing (except PVC).

** Excludes oxidizing acids (see Strong Oxidizing Agents).

*** Excludes TPE gaskets.

E: Continuous exposure for 30 days causes no damage; plastics may last for years.

G: Continuous exposure for 30 days causes minimal or negligible damage.

F: Exposure for 7 days may cause effects such as cracking, reduced strength, or discoloration.

N: Not recommended; may cause immediate damage including cracks, deformation, strength loss, discoloration, dissolution, or permeability loss, depending on the plastic.

Common Plastic Temperature Resistance Chart

	Temperature Range	Melting Point	Characteristics
Polyethylene (PE) *	-50°C - 80°C	105°C - 115°C	Flexible, durable, and chemically resistant
Polypropylene (PP) **	0°C - 120°C	130°C - 171°C	High heat and chemical resistance, lightweight
Polyvinyl Chloride (PVC)	-10°C - 60°C	100°C - 260°C (Depends on the type)	Flame-retardant, electrically insulating, rigid or flexible (depending on additives)
Polystyrene (PS)	-20°C - 70°C	210°C - 240°C	Transparent or opaque, lightweight, easy to mold
Polyethylene Terephthalate (PET)	-40°C - 70°C	250°C - 260°C	Transparent and highly durable
Acrylonitrile Butadiene Styrene (ABS)	-20°C - 80°C	210°C - 270°C	Excellent impact resistance, tough and hard, easy to mold
Polycarbonate (PC)	-135°C - 135°C	220°C - 230°C	Lightweight, durable, translucent, and easy to shape

*Polyethylene (PE) comes in different types, mainly Low-Density Polyethylene (LDPE) and High-Density Polyethylene (HDPE).

Low-Density Polyethylene (LDPE):

Melting Point: 105–115°C (221–239°F)

Maximum Service Temperature: ~80°C (176°F)

Brittleness Temperature: ~-110°C (-166°F)

High-Density Polyethylene (HDPE):

Melting Point: 120–130°C (248–266°F)

Maximum Service Temperature: ~120°C (248°F)

Brittleness Temperature: ~-100°C (-148°F)

Long-Term Low-Temperature Limit: Generally -10°C to 0°C. Copolymer PP (e.g., block copolymers) exhibits better impact resistance at low temperatures, tolerating down to -20°C.

*For reference only: Plastic properties may vary due to modifications; adjust as needed.



USA

NEST Scientific Inc.

Tel: +1-732 381 0268

E-mail: sales@nestscientificusa.com

Website: www.nestscientificusa.com



China

NEST Biotechnology Co., Ltd.

Tel: +86-510-6800 6788

E-mail: info@cell-nest.com

Website: www.cell-nest.com



Netherland

NEST Scientific Europe B.V.

E-mail: info@nestscieu.com

Website: www.nestscieu.com



Japan

NEST Scientific Co.,Ltd.

E-mail: info@nestscijp.com

Website: www.nestscijp.com



United Arab Emirates

Nest Scientific MENA FZE.

E-mail: info@nestsciuae.com

Website: www.nestsciuae.com



Turkey

NEST Scientific Medikal Tic. A.Ş.

E-mail: info@nestscientificturkey.com

Website: www.nestscientificturkey.com



Corporate Address of China:

No. 530, Xida Road, New District, Wuxi, Jiangsu, China



Corporate Address of China:

No. 105, Qunxing Road, Xinwu District, Wuxi, Jiangsu, China



Corporate Address of USA:

3 Convery Blvd, Woodbridge, NJ 07095 USA



NEST



ISO 9001



ISO 13485



ISO 11137



CE