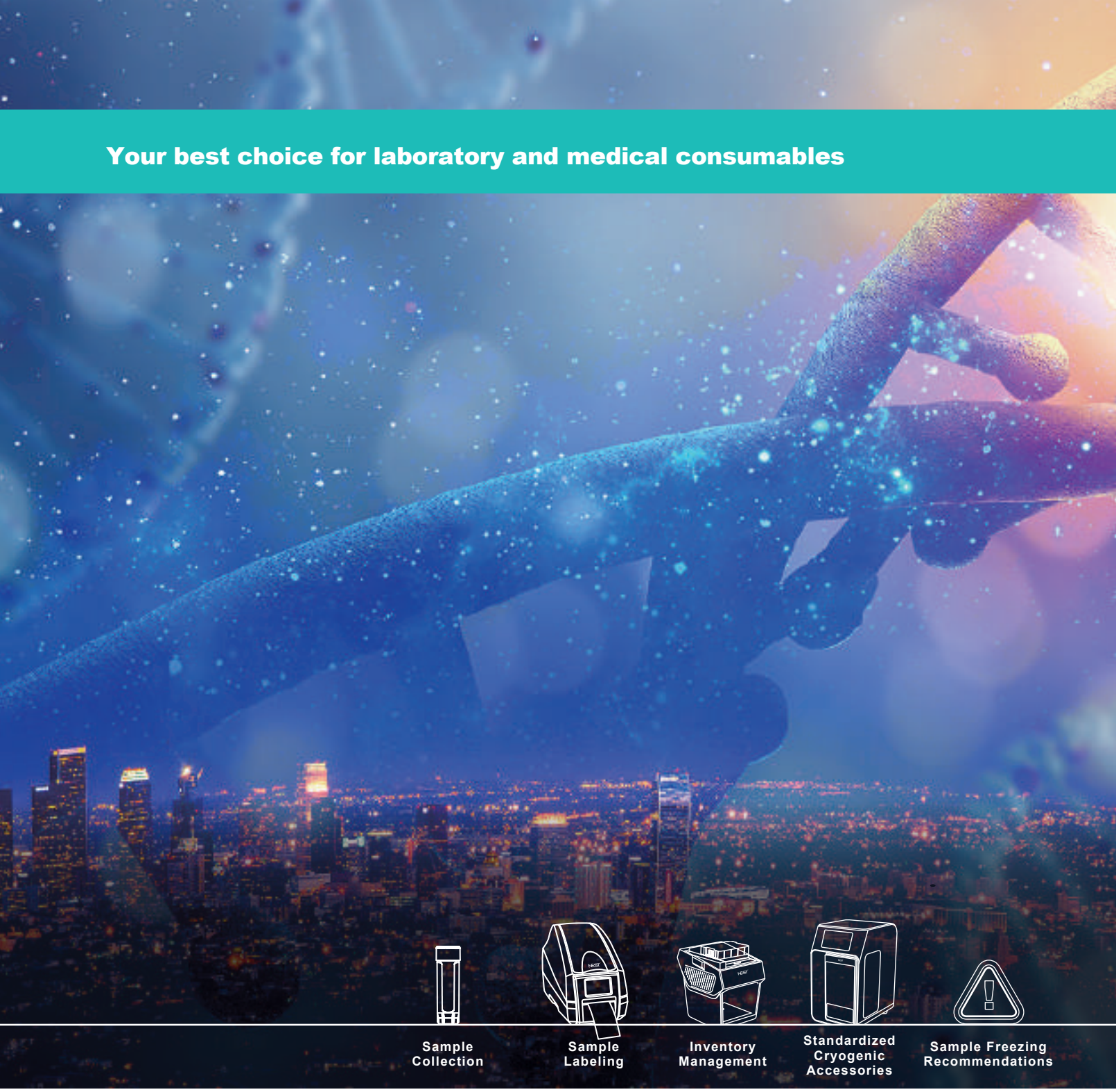
Your best choice for laboratory and medical consumables



NEST Biobank Solutions

Secure your samples, secure your discoveries

NEST®
www.cell-nest.com

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Biobank

A biobank is a platform that follows standard procedures for collecting, processing, and storing biological samples such as biomolecules, cells, tissues, and organs. It brings together limited biobank resources, encourages interdisciplinary and cross-professional collaboration, and is essential in advancing scientific research, medical treatment, and the field of life sciences.

NEST Biobank Solutions provides comprehensive services that cover the entire process, from sample collection to storage, labeling, and inventory management. We ensure the integrity of your samples, accurate identification and recording, traceability and retrieval, privacy, security, facility specifications, and operability, which can speed up your workflow. Our products are suitable for both small laboratories and large institutions.

Establishing an outstanding biobank information management system can offer the following advantages:

- Scientific research planning: This involves setting research goals for the short, medium, and long term, clarifying research tools, resource requirements, personnel configuration, and other elements that can be used in each stage.

- Resource collection and management: Relevant resources are collected and managed according to the resource requirements of different stages in the overall plan. The system can interface with HIS, LIS, and other systems to centralize information and make it easier to analyze.

- Space utilization: Using containers (such as refrigerators and liquid nitrogen tanks) for storing samples is more efficient than manually searching and storing samples, especially as the number of samples increases. Using an information system to automatically allocate and search for sample storage locations improves the space utilization efficiency of refrigerators and other containers.

- Accurate sampling: The mature low-temperature barcode labeling technology scans the barcode to check relevant information in the software tool, which can effectively ensure the accuracy of sampling.

- Quality control: This includes monitoring sample quality throughout the entire process of sample collection, packaging, storage, sampling, and inventory to avoid problems such as contamination and degradation.

- Scientific research project management: Digital and electronic project management enables full-range real-time queries and monitoring. The operation is simple, clear, and greatly improves work efficiency.

Sample Collection——Cryogenic Tubes Series

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.

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	Performance test	Sealing test		Skin sensitivity test	
	Irradiation ISO 13485, ISO 11137		Cryogenic test		Skin irritation test	
Sterility testing laboratory Environmental testing	ISO 7 requirements		High-temperature sterilization test		Acute systemic toxicity test	
	GB 50591-2010		DNase/RNase		Hemolysis test	
	GB/T 16294-2010		Endotoxin	Physical and chemical testing GB/T14233.1-2008	Heavy metal content of materials	Pb, Sn, Cd, Cr
Level 100000 clean workshop environmental testing	ISO 8 requirements		Bottom 2D barcode integrity test		Leachable testing	Reducing substances
	GB 50073-2013	Sterility and particle assurance	Irradiation process verification			
	YY0033-2000		Sterile packaging verification			pH
Purified Water System Validation	GMP requirements		Product sterility test			Evaporation residue
Raw material verification	Physical and chemical testing		Insoluble particle detection			
	Extractable testing		Drop and transportation verification			UV absorbance

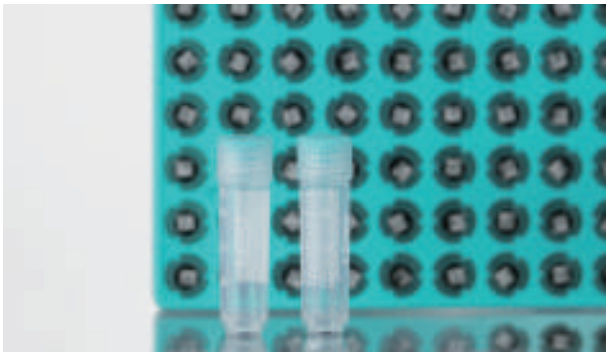
Sample Collection——Cryogenic Tubes Series

• Volume optimization

Volume selection based on quantity and type of sample.

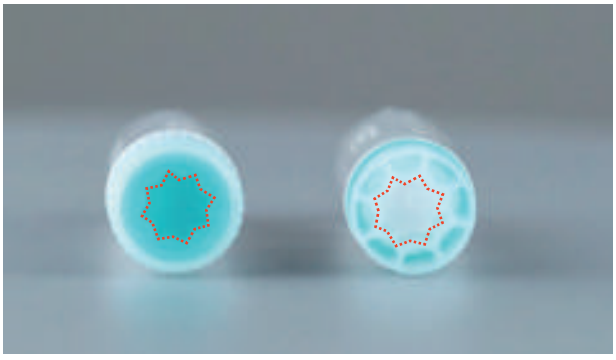
• Improved sealing effect

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



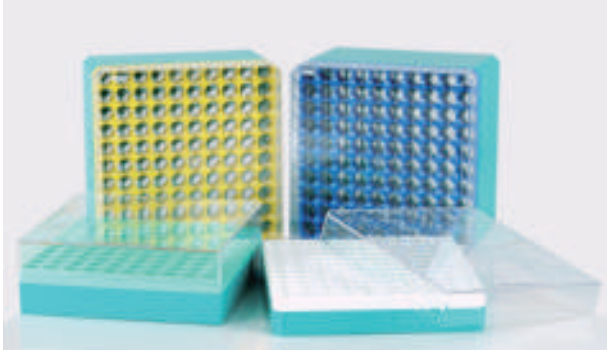
• Material upgrade

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.

Sample Collection——Cryogenic Tubes (with/without 2D barcode)

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

Note:

1. The thread of the external thread cap is not directly exposed to the outside, which minimizes the possibility of cross-contamination;
2. The internal thread cap has the same diameter as the cryogenic tube, which has an advantage in intensive storage applications;
3. The maximum volume of the external thread cap is closer to the nominal volume than the internal thread cap. Since the content volume usually increases during liquid freezing, the recommended usage volume of both external and internal thread cap cryogenic tubes is 80% of the maximum volume;
4. Both storage methods are aimed at ensuring the safety of cryogenic storage and can be freely selected according to the actual user needs.

Sample Collection——Cryogenic Tubes (with/without 2D barcode)

Cryogenic Tubes (without 2D barcode) – Bag Package

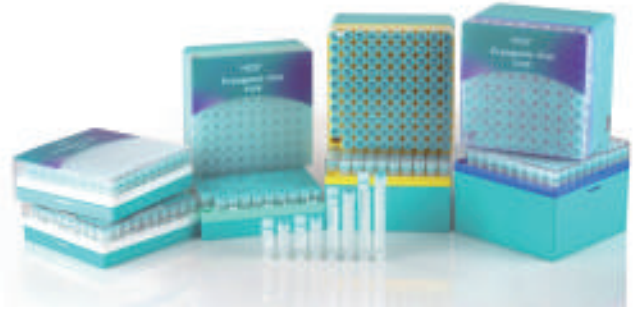
Product Number	Capacity (mL)	Cap Type	Quantity /Bag	Bags /Box	Box /Case
618901	1.0	External thread	96	/	10
606901	1.5	External thread	50	10	4
607401	2.0	External thread	50	10	4
608401	4.0	External thread	50	5	4
609401	5.0	External thread	50	5	4
606801	1.5	Internal thread	50	10	4
607301	1.8	Internal thread	50	10	4
608301	4.0	Internal thread	50	5	4
609301	5.0	Internal thread	50	5	4

*The dimensions of the cryogenic box are detailed on page 09

Cryogenic Tubes (without 2D barcode) - Rack Package

Product Number	Capacity (mL)	Cap Type	Pack-aging	Quantity /Rack	Racks /Case
618906	1.0	External thread	8*12	96	10
606902	1.5	External thread	10*10	100	14
607402	2.0	External thread	10*10	100	12
608402	4.0	External thread	10*10	100	8
609402	5.0	External thread	10*10	100	6
606802	1.5	Internal thread	10*10	100	14
607302	1.8	Internal thread	10*10	100	12
608302	4.0	Internal thread	10*10	100	8
609302	5.0	Internal thread	10*10	100	6

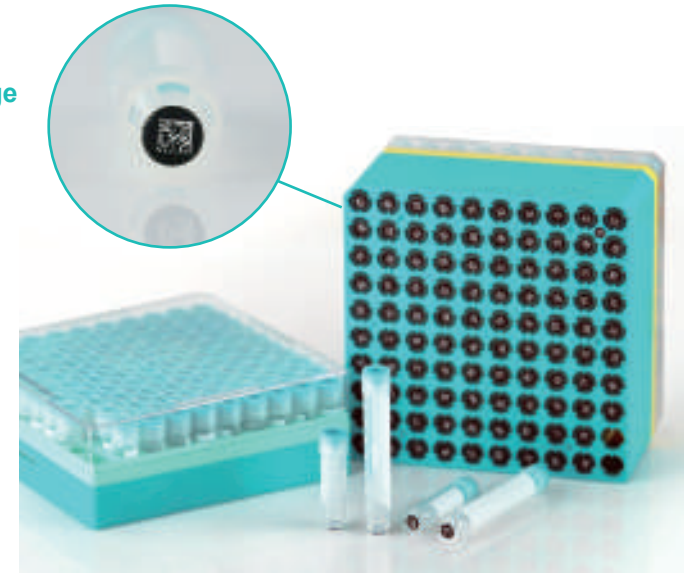
*The dimensions of the cryogenic box are detailed on page 09



2D Barcode Cryogenic Tubes - Rack Package

Product Number	Capacity (mL)	Cap Type	Pack-aging	Quantity /Rack	Racks /Case
606952	1.5	External thread	10*10	100	14
607452	2.0	External thread	10*10	100	12
608452	4.0	External thread	10*10	100	8
609452	5.0	External thread	10*10	100	6
606852	1.5	Internal thread	10*10	100	14
607352	1.8	Internal thread	10*10	100	12
608352	4.0	Internal thread	10*10	100	8
609352	5.0	Internal thread	10*10	100	6
612891	2.0	External thread	6*8	48	10
614591	4.0	External thread	6*8	48	10

*The dimensions of the cryogenic box are detailed on page 09



Sample Labeling——3-Code-in-1 Cryogenic Vial

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, ratch-resistant, not easy to fall off, resistant to DMSO and other organic solvents.
- Hgh uniqueness of laser-etched international standard DATAMATRIX codes.

At the same time, NEST can customize exclusive encodings for you. 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.

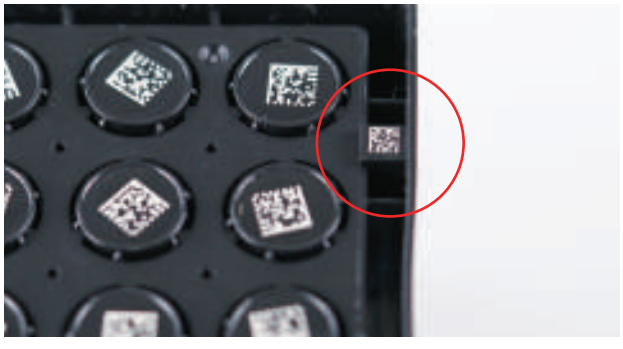
Sterility assurance

- E-beam sterilization, SAL=10^{-6}.

External thread cap Internal thread cap

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 to automatically locate the rack and achieve a safer sample traceability.
- Box lid buckle: The cryogenic box is designed with a buckle that can tightly fit with the box to prevent scattering when dropped. The buckle switch is also convenient and does not fail even after being frozen in liquid nitrogen, ensuring sample safety.



Sample Labeling——3-Code-in-1 Cryogenic Vial

Cap Type	External thread cap							Internal thread cap		External thread cap	
Capacity (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			

Note:

1. The thread of the external thread cap is not directly exposed to the outside, which minimizes the possibility of cross-contamination;
2. The internal thread cap has the same diameter as the cryogenic tube, which has an advantage in intensive storage applications;
3. The maximum volume of the external thread cap is closer to the nominal volume than the internal thread cap. Since the content volume usually increases during liquid freezing, the recommended usage volume of both external and internal thread cap cryogenic tubes is 80% of the maximum volume;
4. Both storage methods are aimed at ensuring the safety of cryogenic storage and can be freely selected according to the actual user needs.

Bag Package

Rack Package

Yellow Cap

SBS 3-Code Cryogenic Tubes - Bag Package

Product Number	Capacity (mL)	Cap Type	Quantity /Bag	Bags /Case
612541	0.5	External thread	96	10
612641	0.75	External thread	96	10
612741	1	External thread	96	10
612841	2	External thread	48	10
614541	4	External thread	48	10
614641	6	External thread	24	10
614741	8	External thread	24	10
612521	0.5	Internal thread	96	10
612721	1	Internal thread	96	10
612041	1.9	External thread	48	10
614041	4.0	External thread	48	10

Yellow Cap

SBS 3-Code Cryogenic Tube - Rack Package

Product Number	Capacity (mL)	Cap Type	Quantity /Rack	Racks /Case
612551	0.5	External thread	96	10
612651	0.75	External thread	96	10
612751	1	External thread	96	10
612851	2	External thread	48	10
614551	4	External thread	48	10
614651	6	External thread	24	10
614751	8	External thread	24	10
612531	0.5	Internal thread	96	10
612731	1	Internal thread	96	10
612051	1.9	External thread	48	10
614051	4.0	External thread	48	10

Yellow Cap

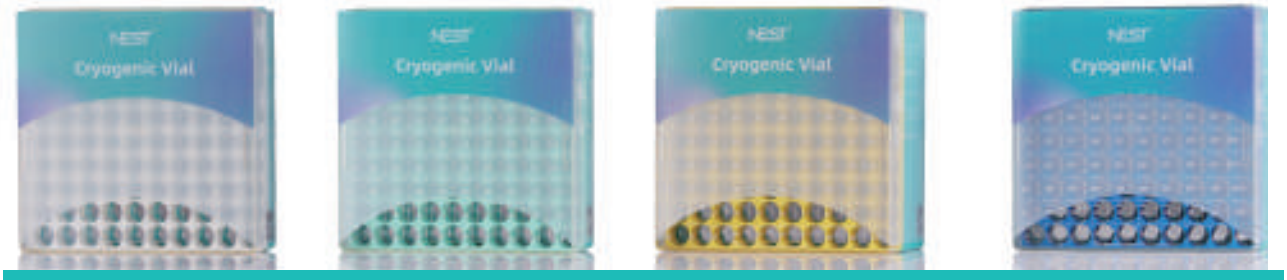
Sample Labeling——Cap Inserts, Cryogenic Box

Cap Inserts

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

*The new Cryogenic Vial Labels are exclusively designed 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℃ to 70℃.
- 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

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

3-Code-in-1 Cryogenic Vial

Product Number	Compatible Cryogenic Tube Capacity (mL)	Format (Holes)	Size (L x W x H)	Sterilization	Quantity/Box
616041	2.0	8*6	127×85.3×48.3	No	10
616841	6.0	4*6	127×85.3×60.4	No	10

*The new Cryogenic Box are exclusively designed to work with NEST's latest collection of Cryogenic Vials.

Sample Labeling——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)
Weigh	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

Inventory Management——Sample Management System

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

Adaptability
Compatible with NEST cryogenic boxes and other ANSI-SBS standard specifications, making sample storage quick and easy.

Efficient and flexible
Pre-set with information about storage equipment, cryogenic boxes, and data interfaces, allowing for quick and easy customization.

Interconnection
Data interface makes it easy to connect sample information with other related information systems, saving you valuable storage space.

User-friendly
Designed for easy use, with a virtual model that allows for simple and intuitive sample operations.

Secure and reliable
Permission system and operation log ensure the security and integrity of your data, giving you peace of mind.

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

Inventory Management——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 cryo genic 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

Inventory Management——Multi-Rack Reader, Barcode Scanner

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.

Standardized Cryogenic accessories——Decapper

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

Standardized Cryogenic Accessories——Defrosting Device

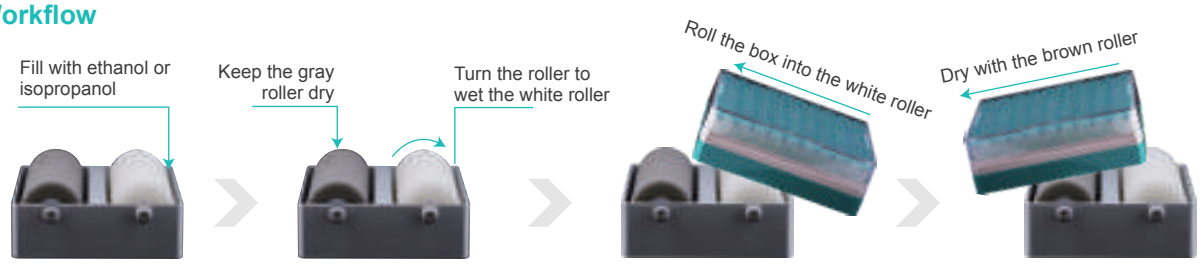
Product introduction

The NEST defrosting device is a tool used to quickly remove frost from the bottom of boxed cryogenic vials. When cryogenic vials are stored in liquid nitrogen vapor phase or -80 ° C freezer, ice can form at the bottom of the vials. However, to ensure the rapid reading of cryogenic vial decoding systems, it is necessary to clearly identify the 2D code at the bottom of the vial. Therefore, rapid defrosting has become a necessary step.

Features

- Wide compatibility: can be used for 24, 48, 96, and 384 formats of different brands of cryogenic boxes.
- Sample integrity: achieves bottom defrosting without heating, and the sample can still maintain a frozen state.
- Practicality: sponge roller is easy to assemble. The first roll requires the addition of a special reagent, and the second roll dries it, making it easy to use.

Workflow



Add ethanol or isopropanol to infiltrate the white sponge.

Repeat the process multiple times until the frost is completely removed.

Product name	Defrosting device
Product number	106001
Base material	Aluminum alloy
Defrosting part	High-quality sponge
Supporting reagent	Ethanol

Consumables for the defrosting device	Sponge
Product number	106003/106004
Material	High-quality sponge
Color	White/Brown
Packaging method	1 piece/pack

Standardized Cryogenic Accessories——Vertical Freezer Racks

Product introduction

NEST vertical freezer racks are primarily used for isolating and managing biological and medical clinical samples in liquid nitrogen tanks. They allow cryogenic boxes to be stored and efficiently used in limited refrigeration space.

Features

- Made of 304 ultra-thick stainless steel, with long-lasting and anti-corrosive properties, low-temperature resistance, oxidation resistance, safe and practical.
- Compatible with 2-inch, 3-inch, and 3.75-inch cryogenic boxes, suitable for international standard refrigerators.
- Flanging design to prevent scratches and lightweight.
- Freezer racks can be customized according to user needs.

Suitable refrigerator brands: Taylor Wharton, MVE, etc.

Standardized Cryogenic accessories——Vertical Freezer Racks

Product number	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

Product number	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

Product number	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——

NEST 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 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

Product Features

- Small size, less space on the workbench.
- Especially suitable for scenarios with few samples to be thawed and resuscitated.
- The LCD screen can display the real-time temperature of the sample.
- Has account management and data export functions
- Comes with a transfer container for transferring cryogenic tubes.

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

Sample freezing recommendations——

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.

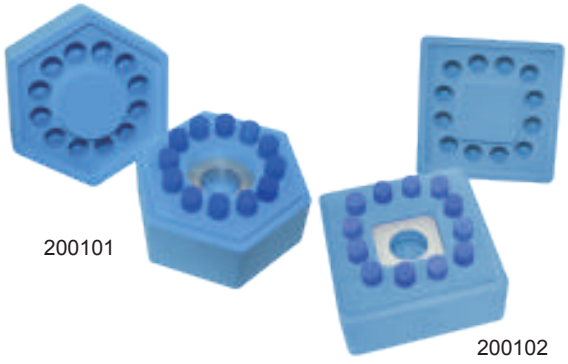
If the sample has already been stored in the liquid phase of liquid nitrogen, the following measures are recommended to reduce the risks:

- 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.



200101

200102

- 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.

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

Cell Freezing Box

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

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