Intelligent Biobank Management System

Batch identification in seconds, adopt an ingenious and subversive intelligent management mode

Support simultaneous management of multiple type biobanks

Support simultaneous use of multiple terminals

Support cryogenic vials of different volumes

Identification in seconds

Intelligent Management

Intelligent Biobank Management System

NEST®
NEST Biotechnology Co., Ltd.

Product Advantages

Identification in Seconds
Complete whole box identification and storage in 3-5 seconds.

High Compatibility
Support cryogenic vials of different sizes. 9*9, 10*10 and 12*8 are all suitable.

Permanent Storage
Permanently store historical records, making all operating information clear at a glance.

Easy to Use
Intelligent judgment of warehousing type and guide users to operate.

Multiple-terminal
Storage at service terminals, support simultaneous use of multiple terminals.

Intelligent Selection
Intelligent selection of storage location.

High Efficiency
Support simultaneous use of multiple terminals such as refrigerators, liquid nitrogen tanks, etc.

Easy to Manage
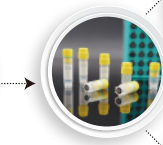Hierarchical management design, to prevent accidental deletion of information.

Handheld scanner: 106111

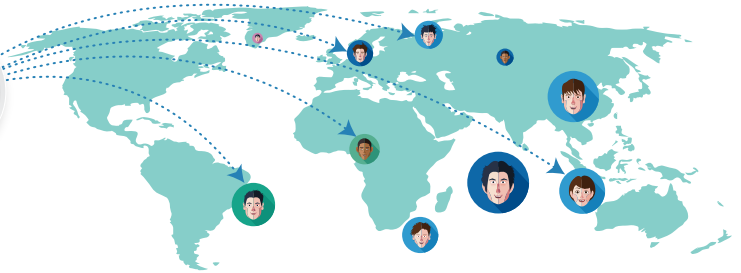Storage at server terminals, support simultaneous use of multiple terminals

Sampling → Transfer samples into cryogenic vials → Scan and record the information Outbound/Inbound → Server

Benchtop scanner: 106112

Benchtop scanner:

Cat. No.	106112
Scan time of whole box	3-5s
Normal identification rate	≥99.99%
System interface	USB
Operating system	Windows 10 64bit
Input power	AC 100-240V～,10W
Working temperature	0-40℃

Handheld scanner:

Cat. No.	106111
Scan time of single vial	0.5s
Normal identification rate	≥99.99%
System interface	USB
Operating system	Windows 10 64bit
Input power	5V, 2W
Working temperature	0-40℃

Application

Medical and health service providers
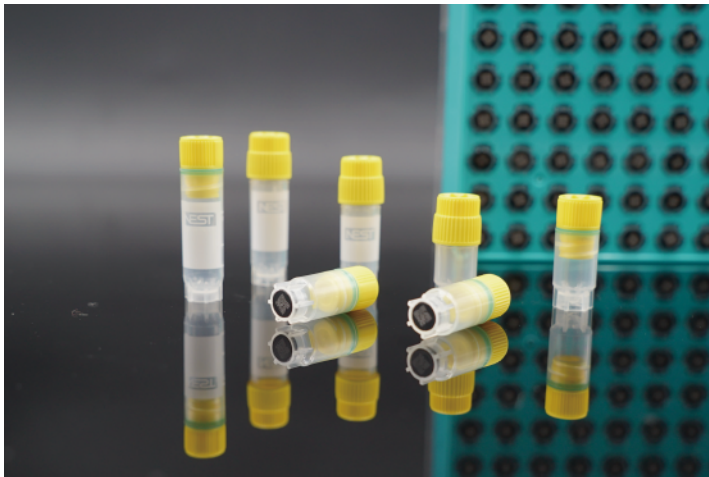
Scientific research institutions

Biopharmaceutical companies

Biological labs

Cell&sperm banks,...

◉ Feature
- Autoclavable
- Sterilized by E-Beam
- Non-pyrogenic, DNase/RNase free
- Recommend to store in gas phase of the nitrigen tank

◉ Warning!
Do not use cryogenic vials for storage in the liquid phase of liquid nitrogen. Only store vials in the vapor phase above the liquefied gas. Always use appropriate safety equipment when removing vials from cryogenic storage.

◉ Refrigeration
The lowest temperature can withstand -196°C (with screw cap). All our polypropylene pipes are suitable for low temperature storage, except for liquid nitrogen.

◉ 2D Barcode Cryogenic Vials, Bulk Package

Cat. No.	Volume(mL)	Cap Style	/Pack	/Case
618041	0.5	External Thread	50	2,000
606041	1.2	External Thread	50	2,000
607041	2.0	External Thread	50	2,000
624041	3.0	External Thread	50	1,000
608041	4.0	External Thread	50	1,000
609041	5.0	External Thread	50	1,000
618141	0.5	Internal Thread	50	2,000
606141	1.2	Internal Thread	50	2,000
607141	2.0	Internal Thread	50	2,000
624141	3.0	Internal Thread	50	1,000
608141	4.0	Internal Thread	50	1,000
609141	5.0	Internal Thread	50	1,000

◉ 2D Barcode Cryogenic Vials, Racked Package

Cat. No.	Volume(mL)	Cap Style	/Rack	Rack/Cs
618152	0.5	Internal Thread	10*10	16
606152	1.2	Internal Thread	10*10	14
607152	2.0	Internal Thread	10*10	12
618053	0.5	External Thread	9*9	16
606053	1.2	External Thread	9*9	14
607053	2.0	External Thread	9*9	12
624053	3.0	External Thread	9*9	8
608053	4.0	External Thread	9*9	8
609053	5.0	External Thread	9*9	6
618153	0.5	Internal Thread	9*9	16
606153	1.2	Internal Thread	9*9	14
607153	2.0	Internal Thread	9*9	12
624153	3.0	Internal Thread	9*9	8
608153	4.0	Internal Thread	9*9	8
609153	5.0	Internal Thread	9*9	6

4ml 1.8ml 1.8ml 1.9ml

✺ Series Introduction

The two-color vial body of an integrated injection molding can realize multi-code tracking, and it can support the traceability of samples and data sharing among multiple users, laboratories and automation, making the warehousing and ex-warehousing of samples more convenient and faster, while ensuring the safety of the sample storage process.

Three-code-in-one (digital code, barcode, QR code)

• The vial has laser-etched international standard DATAMATRIX 2D code at the bottom.

• The barcode and digital code at the side are anti-fading, anti-deforming, wear proof and resist DMSO and other organic solvents; 100% clear and readable.

✺ Material Characteristics

• The vial body is made of medical-grade cryogenic polypropylene (PP), which meets USP Class-6 standards and the vial cap is made of high density polyethylene (HDPE), so that the vial is recommended to be used in -196℃ liquid nitrogen phase;

• DNase/RNase free, non-endotoxin;

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

✺ NEST Advantages：

Testing and control in strict accordance with quality requirements.

Low Temperature Test	Sealing Test	Sterility Test	Endotoxin Test

-80℃ cryogenic freezing test,
-196℃ liquid nitrogen test;

DNA and RNA enzyme test

✺ Precautions

• After the cryogenic vial is taken out of the liquid nitrogen, its bottom should be wiped with a dry towel, so that the QR code can be better identified;

• The freezing storage sample size should not exceed the maximum working volume required by the cryogenic vial;

• During the freezing storage, the vial cap must be tightened, to prevent liquid nitrogen from entering during the freezing process;

• Before the cryogenic vial is taken out of the liquid nitrogen, proper protective measures should be taken first, to avoid causing safety problems in the laboratory.

• Warning!Do not use cryogenic vials for storage in the liquid phase of liquid nitrogen. Only store vials in the vapor phase above the liquefied gas. Always use appropriate safety equipment when removing vials from cryogenic storage.

• Refrigeration：The lowest temperature can withstand -196°C (with screw cap). All our polypropylene pipes are suitable for low temperature storage, except for liquid nitrogen.
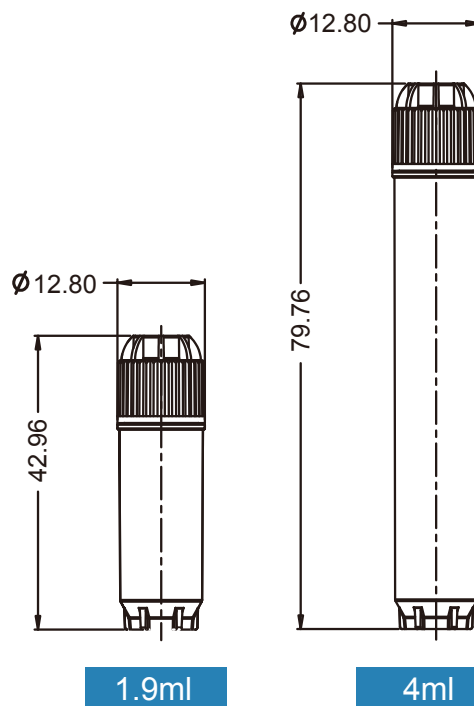
● 3D Barcode Cryogenic Vial, SBS Format

The product meets the SBS standard and provides an effective safety guarantee and management for biological sample libraries and other warehouses of various chemicals and biological products stored at low temperatures.

4mL   1.9mL

Safety Lock →

4mL   1.9mL
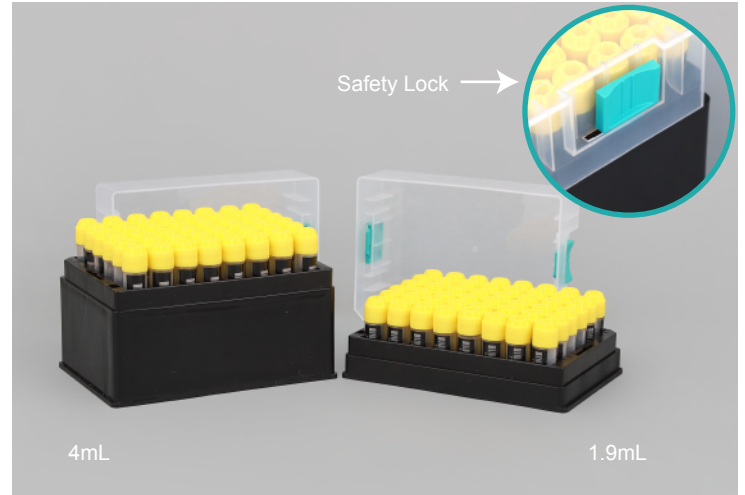
Cat.No.	Product Description	Pack
612041	3D Barcode 1.9 mL Cryogenic Vial, SBS Format, Self-Standing, External Thread, Caps on, Sterile	48/Pk, 480/Cs
612047	3D Barcode 1.9 mL Cryogenic Vial, SBS Format, Self-Standing, External Thread, Caps Separated, Sterile	48 Vials/Pk, 48 Caps/Pk, 480/Cs
614041	3D Barcode 4.0 mL Cryogenic Vial, SBS Format, Self-Standing, External Thread, Caps on, Sterile	48/Pk, 480/Cs
614047	3D Barcode 4.0 mL Cryogenic Vial, SBS Format, Self-Standing, External Thread, Caps Separated, Sterile	48 Vials/Pk, 48 Caps/Pk, 480/Cs
612051	3D Barcode 1.9 mL Cryogenic Vial, SBS Format, Self-Standing, External Thread,Racked, Sterile	48/Pk, 480/Cs
614051	3D Barcode 4.0 mL Cryogenic Vial, SBS Format, Self-Standing, External Thread,Racked, Sterile	48/Pk, 480/Cs

● Technical Drawing

Ø12.80

Ø12.80

79.76

42.96

1.9ml   4ml

◉ 3D Barcode 1.8 mL Cryogenic Vial

The size of the vial body is suitable for the common freezing boxes in the market, which is convenient for customers to use.
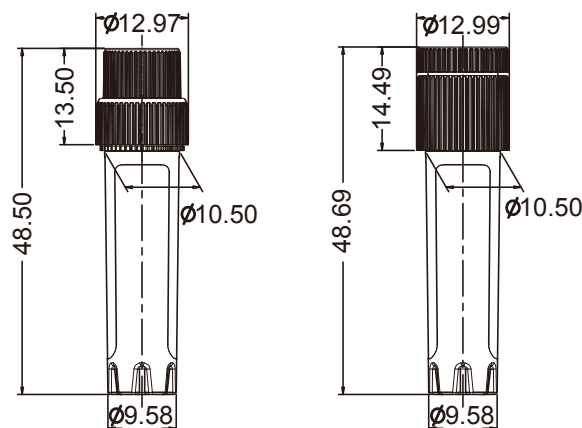
External Thread

External Thread, Double Secure Cap

◉ Characteristics of External Thread, Double Secure Cap

- Excellent sealing performance: permanent reversal prevention;
- High storage safety: the inside forms a closed and isolated space separated from the outside without leakage, favorable for storage and transportation.
- Memory of use history: the middle cover will be punctured when taking sample out, that is, leave a use mark. This function is to ensure the original fidelity of the sample;
- Convenient sampling without contamination: the soft rubber sealing layer can be punctured with a pipette tip or a syringe needle. The outer cover won't be contaminated by the sample, ensuring safety of the personnel and environment.

| Cat.No.	Product Description	Pack
627102	3D Barcode 1.8 mL Cryogenic Vial, Self-Standing, External Thread, Double Secure Cap	10*10/Rack, 10 racks /Cs, 1000 vials/Cs
627002	3D Barcode 1.8 mL Cryogenic Vial, Self-Standing, External Thread	10*10/Rack, 10 racks /Cs, 1000 vials/Cs
627101	3D Barcode 1.8 mL Cryogenic Vial, Self-Standing, External Thread, Double Secure Cap	50/Pk, 2000Cs
627001	3D Barcode 1.8 mL Cryogenic Vial, Self-Standing, External Thread	50/Pk, 2000Cs

◉ Technical Drawing

Ø12.97
13.50
48.50
Ø10.50
Ø9.58

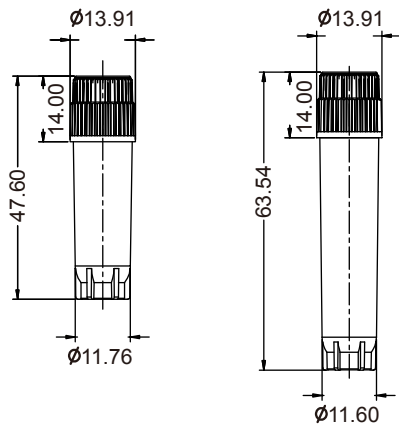External Thread

Ø12.99
14.49
48.69
Ø10.50
Ø9.58

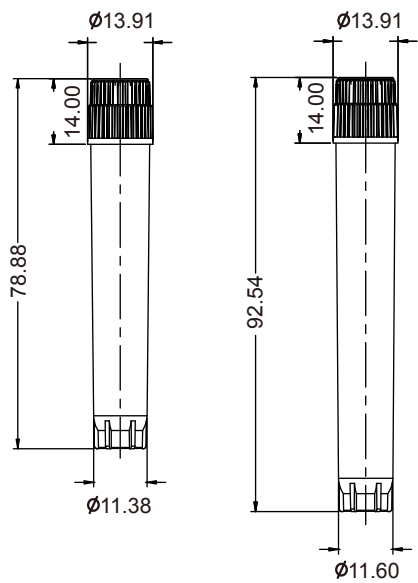External Thread, Double Secure Cap

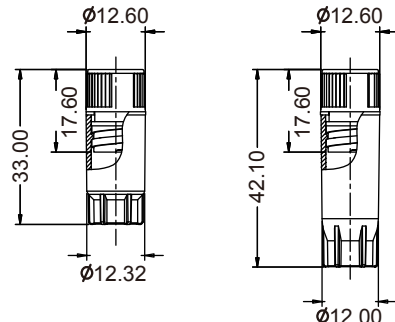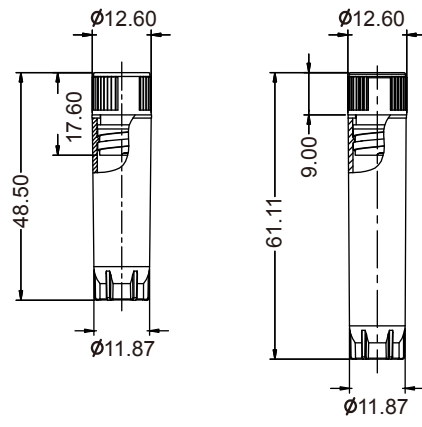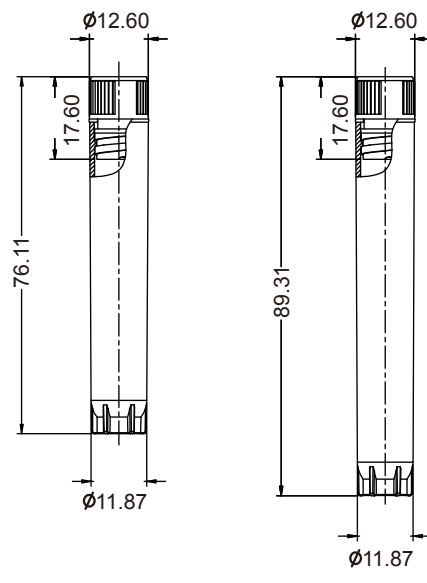## ●● External Thread
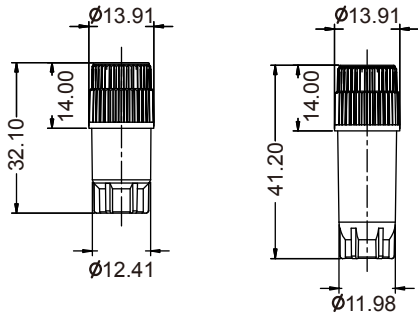
0.5ml

1.2ml

2ml

3ml

4ml

5ml

●● Internal Thread

0.5ml

1.2ml

2ml

3ml

4ml

5ml