



Microtubes



Centrifuge Tubes Screwcap Tubes





Cryotubes

# Hyper Microtube

# 2.0<sub>mL</sub> The Ultimate Microtube









Material: Virgin Polypropylene Centrifugal force: 20,000 xG (water 1.0 mL / 15 minutes) With scale (500 / 1000 / 1500 µL) Flat top (with marking space) RNase/DNase/Human-DNA free

#### [2.0 mL]

Material: Virgin Polypropylene Centrifugal force: 20,000 xG (water 1.5 mL / 15 minutes) With scale (500 / 1000 / 1500 / 2000 µL) Flat top (with marking space) RNase/DNase/Human-DNA free



Cat. No.	ltem	Unit	Case
131 <b>-</b> 715C	1.5 mL, Microtube with Locking-Cap, Round Bottom, Hard-Touch, Natural	1000 tubes / bag	10 bags
131 <b>-</b> 7155C	1.5 mL, Microtube with Locking-Cap, Round Bottom, Soft-Touch, Natural	1000 tubes / bag	10 bags
132-620C	2.0 mL, Microtube with Locking-Cap, Round Bottom, Slight-Stiff-Touch, Natural	1000 tubes / bag	5 bags

Hyper Microtube

# **Features**



**Locking mechanism** Safety lock system is equipped. Hard type and soft type are available.



Friendly hinge for finger Rounded and embossed cap-edge reduces irritation to the finger, and makes it easier to close the cap.



The volume is easily recognized with the scale for each 0.5 mL described on the tube.



Contamination prevention Lock part prevents the thumb from touching the inner cap when opening and closing.



Unique shape of cap Easy opening cap with less force. Flat cap allows marking on the top.



**Writing space** Writing space is available on the surface of tube (opposite side from the scale side).



# **Nuclease-free certificate**

This mark shows RNase/DNase/Human-DNA free. Products with this mark are manufactured in the clean room under our high quality control, and inspected to meet our strict quality standards. RNase/DNase-free certificates can be issued for each lot upon your request.

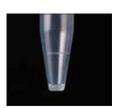
# Microtube High-Seal



# Pursuing a higher level of sealability.



Writing space Flat cap allows marking on the top.



**Flat bottom** 







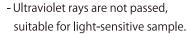


Material: Virgin Polypropylene Centrifugal force: 20,000 xG (water 1.0 mL / 15 minutes) With scale (200 / 1,000 µL) Flat top (with marking space) RNase/DNase/Human-DNA free

Cat. No.	Item	Unit	Case
131-815C	1.5 mL, Microtube, High-Seal, Flat Bottom, Slight-Stiff-Touch Cap, Natural	1000 tubes / bag	10 bags
131 <b>-</b> 8155C	1.5 mL, Microtube, High-Seal, Flat Bottom, Soft-Touch Cap, Natural	1000 tubes / bag	10 bags

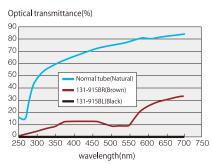


# 1.5 mL Black & Brown for Shading



- Convenient for experiment and preservation of the sample.

- Completely opaque black and translucent brown are available.



Material: Virgin Polypropylene Centrifugal force: 20,000 xG (water 1.0 mL / 15 minutes) With scale (200 / 1,000  $\mu$ L) Flat top (with marking space) RNase/DNase/Human-DNA free



	38.5 mm

<u>uuluu</u>

Graduated

AC

Autoclavable

Cat. No.	Item	Unit	Case
131 <b>-</b> 915BL	1.5 mL, Microtube, Flat Bottom, Slight-Stiff-Touch Cap, Black for Shading	1000 tubes / bag	10 bags
131 <b>-</b> 915BR	1.5 mL, Microtube, Flat Bottom, Slight-Stiff-Touch Cap, Brown for Shading	1000 tubes / bag	10 bags



# **Round Bottom Standard Microtube**







Material: Virgin Polypropylene Centrifugal force:

Flat top (with marking space) RNase/DNase/Human-DNA free









Marking space available opposite the scale.

Cat. No	ltem	Unit	Case
130-806C	0.6 mL, Microtube, Round Bottom, Snap Cap, Natural	1000 tubes / bag	10 bags





# Round Bottom "Mega" Tube







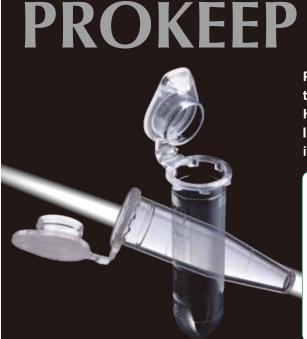








Cat. No	ltem	Unit	Case
233-150C	5.0 mL, Megatube, Round Bottom, Slight-Stiff-Touch Cap, Natural	250 tubes / bag	10 bags



# **Protein Low Binding Tube**

PROKEEP is a high quality tube developed for the use of protein or peptide analysis (SDS-PAGE, HPLC, MS) as it mitigates the risk of the sample loss during experiment and preservation, and improves the signals detection.

# Our special blending plastic materials avoid problem caused by elution from the tube

PROKEEP tubes reduce protein binding as a result of using our special blending of raw materials with low protein/peptide absorption and our technique of high precision finishing on the mold (no surface treatment on PROKEEP). With PROKEEP, elution from the tube can be avoided and better experiment result on MALDI MS analysis and Protein Chip analysis can be anticipated (See below).

# PROKEEP's Protein Low Binding performance

Loss of protein and peptide when using plastic containers is caused by the following two factors.

- a. Solution remained in the container after pipetting or centrifuge.
- b. Adsorption of protein and peptide to the plastic containers.

PROKEEP has been developed by approaching both of two factors.

Watson's PROKEEP containers are incomparable in terms of achieving a low residue signal. PROKEEP's residue signal is approximately 1 / 20 million, which is 1 / 850 residue amount of other conventional hydrophilic products in the following factor (1).

No occurrence of peptide signal loss during 2 weeks-storage in the following factor (2).

#### (1) Residue Protein Amount: Fig 1

#### Test Method

FITC-BSA solution (1 µg/mL) was put in a microtube and left for 1 hour at room temperature. The fluorescence of the surface of the tube was measured and digitized after removal of the solution, and then the residual protein mass was analyzed. This method evaluates the residual amount of protein on the surface of the tube.

#### Results:

The residue amount on PROKEEP low protein binding tube is extremely low, which is 1 / 20million of the protein added. Tubes with hydrophilic surface treatment exhibited higher residue amount due to characteristic of the treatment.(Fig.1)

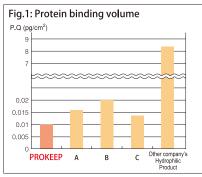
# (2) Adsorption of protein and peptide to the tube: Fig 2

#### Test Method:

A solution (0.1%TFA, 10  $\mu$ L) equivalent to 500 fmol/ $\mu$ L peptide mix contained in Bruker Daltonics's Peptide calibration standard (#206195) was put in a tube and kept at 4°C for 2 weeks. Then, the peptide in the tube was collected and analyzed by mass spectrometer (Bruker Daltonics's Ultraflex tof/ tof).

#### Results:

In the case of PROKEEPs low protein binding tube, all the peaks were detected after the 2 weeks. Conventional tube's showed a part of the peaks were undetectable and peptide loss by adsorption was observed (Fig 2B).



#### (3) Crystallization on MALDI Target Plate

Fig.3

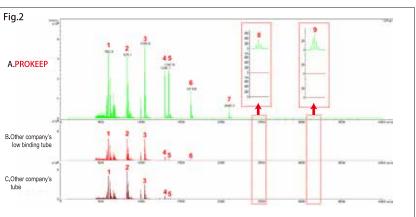


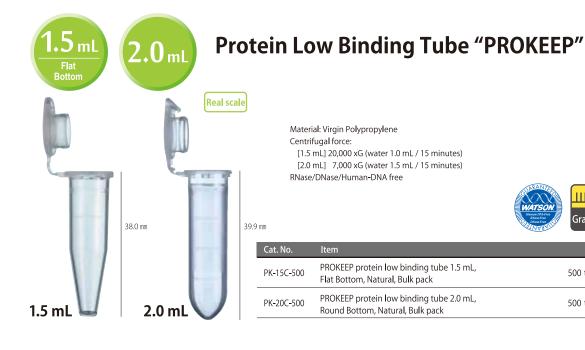
PROKEEP

Other company's hydrophilic treated tube Other company'
low binding

#### Test Method:

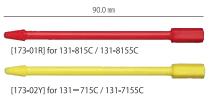
In the crystallization process on a target plate, which is the indispensable process of MALDI type mass spectrometer analysis, a sample collected from another company's hydrophilic treated tube exhibited a disturbance in crystallization and it was difficult to conduct an accurate measurement, and elution of resin content was suspected(Fig. 3). PROKEEPs low protein binding tube showed equivalent performance to the tube recommended by Bruker Daltonics.



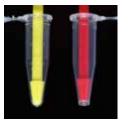




# **Special pestle for Watson brand microtubes**



Material:Polypropylene





Pestles can be attached to bit-type screw drivers commercially available.

Graduated

500 tubes / bag 20 bags

500 tubes / bag 20 bags

Autoclavable



Cat. No.	ltem	Unit	Case
173 <b>-</b> 01R	Pestles for Flat Bottom Microtube (131-815C / 8155C), Red	10 pieces	100 bags
173 <b>-</b> 02Y	Pestles for Round Bottom Microtube (131-715C / 7155C), Yellow	10 pieces	100 bags

# Cap Lock

# **Designed to fit Watson brand microtubes**



Material: Elastomer



Squeeze the knob of CAP LOCK to open



Pinch the closed lid of the tube with CAP LOCK



Then, CAP LOCK fits perfectly



The knob of CAP LOCK is useful when picking up from thermostat bath



Cat. No.	Item	Unit	Case
174-17Y	Cap Lock for 1.5 / 2.0 mL Microtube, Yellow	100 pieces	30 bags

# **Tubes**

# Centrifuge Tubes

Half plug seal, Sealing point, Triple thread screw...



# New centrifuge tube full of new ideas to achieve high airtightness



Material: Polypropylene (tube) Polyethylene (cap)





#### RNase / DNase / **Human-DNA free**

Products with this mark are manufactured in the clean room under our high quality control, and inspected to meet our strict quality standards.

RNase/DNase-free certificates can be issued for each lot upon your request.



#### Pyrogen test

Results: Endotoxin level less than 0.05 EU/mL

\*according to Internal test

[Test condition] Centrifuge: TOMY MX-305

**Centrifugal force** 

Temp.: 20℃

Distilled Water: 12 mL for 15 mL CF tube

Tested with conical centrifuge tubes, 15mL and 50mL.

15 mL centrifuge tube: 18,000 × G (14,100 RPM) 50 mL centrifuge tube:  $18,000 \times G(14,100 \text{ RPM})$ 

40 mL for 50 mL CF tube

Rotor: AR-510-04 Centrifugation: 5 minutes





3	Cat. No.	Item		Unit
	1332 <b>-</b> 015S	15 mL, Centrifuge Tube, Conical Bottom, White Cap	erilized	480 pieces (48 pieces × 10 bags)
	1342 <b>-</b> 050S	50 mL, Centrifuge Tube, Conical Bottom, White Cap Ste	erilized	480 pieces (24 pieces × 20 bags)
	1342-550S	50 mL, Centrifuge Tube, Self-standing, White Cap	erilized	480 pieces (24 pieces × 20 bags)

# **High airtightness**

# **Sealing point**

The proper cap torque-position is informed by the click, when one of the 3 protrusions inside the lid fits into the groove on the tube.



①The protrusions on the cap indicate you the best sealing position wher it fits on the groove.



# Half plug seal

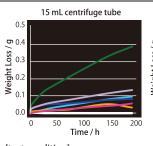
Bigger sealing area performs higher airtightness.

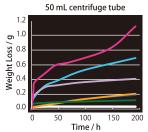
# **Triple thread screw**

Triple thread screw enables easy open/close with less rotation. It also prevents screwing a cap diagonally.



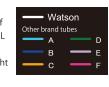
2) The left picture shows too much screwing when the protrusions go over the groove.





#### [test condition]

Fill centrifuge tube with 100% EtOH to 80% of the max. volume (12 mL for 15 mL tube, 40 mL for 50 mL tube). Place the tube upside-down under the room temperature and check weight loss with time.



# 400 3E

loosening the cap and sampl leakage when the protrusion come before the groove.

#### **Convenient functions**

# Wide writing space

It has wide writing space on a cap and the frosted area on the body.



# High precision-scale till the cone top

Graduation is molded so that it does not fade away. Scale is made till 0.5 mL



# Centrifuge Tube Floating Rack "Jellyfish"



- Dedicated rack for four 15 mL / 50 mL centrifuge tubes.
- The rack can be used as a floater by changing the direction of the tray.











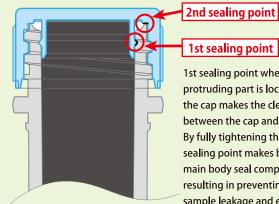
Cat. No.	ltem	Unit	
1541-809	Centrifuge Tube Floater Rack "Jellyfish"	1 piece	

# O-ring less Screwcap Tubes

# O-ring less Screwcap Tube is NOT autoclavable. If autoclave process needed, please apply "Screwcap Tubes" with O-ring on pages 50 and 51.

# Double-sealed design, Leak-less even without O-ring

### Two sealing points provide high airtightness



1st sealing point

1st sealing point where the protruding part is located inside of the cap makes the clearance between the cap and the body seal. By fully tightening the cap, 2nd sealing point makes both upper and main body seal completely seal, resulting in preventing test sample leakage and evaporation.

about180° 2nd sealing point The part where the protrusion of the cap matches the tube body by tightening is "1st sealing 1st sealing point point". Tightening 1st sealing Extra tightening up to about 180° where 2nd sealing point is located is capable of high sealing performance. Tighten up to 1st sealing point "2nd sealing point" rtion of thread



#### **Durable for** centrifugal force 20,000 xG\*

Our originally designed tube using 100% virgin medical-grade polypropylene proves resistance against a centrifugal force as high as 20,000 x G (water, 15 min, adapter used).

\*0.5mL Tube: 17,000 x G



#### **User-friendly and small group** packaging

A small sterilized package consists of 20 pcs of screw tubes with its caps sealed completely.

More hygienic performance is available.



#### **Convenient for positioning** the tube when centrifugation

A marker (notch), which is convenient for positioning the tube during centrifugation and other purposes, is provided on the flange of the tube.



#### **Polyethylene Cap**

The lineup of user-selectable 5 colors is capable of classification.

\* Not Autoclavable

#### **Precautions: Handling Screwcap Tubes** under the Liquid Nitrogen

- 1. In terms of safety, store the screwcap tubes in the vapor phase.
- 2. To avoid any risks such as the tube rupture and the sample spatter, do NOT handle the screwcap tube under the liquid phase.
- 3. Fill up the test sample into the body of the screwcap tube up to the degree of 90% of the maximum content.
- 4. Wear a face shield, protective clothes, and gloves when handling liquid nitrogen for defrosting.



Material: Virgin Polypropylene (tube) Polyethylene (cap) Centrifugal force: 17,000 x G (water 0.5 mL / 15 minutes) Flat top (with marking space)







Cat. No.	Item	Cap color	Unit	Case
1394-050-SS-CS	0.5 mL, O-ring less Screwcap Tube, Self-standing	d clear	500 tubes (20 tubes×25 bags)	10 units
1394-050-SS-BS	0.5 mL, O-ring less Screwcap Tube, Self-standing Sterilize	d blue	500 tubes (20 tubes×25 bags)	10 units
1394-050-SS-GS	0.5 mL, O-ring less Screwcap Tube, Self-standing Sterilize	d green	500 tubes (20 tubes×25 bags)	10 units
1394-050-SS-RS	0.5 mL, O-ring less Screwcap Tube, Self-standing	d red	500 tubes (20 tubes×25 bags)	10 units
1394-050-SS-YS	0.5 mL, O-ring less Screwcap Tube, Self-standing Sterilize	d yellow	500 tubes (20 tubes×25 bags)	10 units
1394-050-SS-LP-CS	0.5 mL, O-ring less Screwcap Tube attached Loop Cap, Self-standing Sterilize	d clear	500 tubes (20 tubes×25 bags)	10 units





O-ring less Screwcap Tubes



Material: Virgin Polypropylene (tube) Polyethylene (cap) Centrifugal force: 20,000 x G (water 1.0 mL / 15 minutes) Flat top (with marking space)







Cat. No.	Item	Cap color	Unit	Case
1394-150-CS	1.5 mL, O-ring less Screwcap Tube, Conical Bottom Steriliz	ed clear	500 tubes (20 tubes×25 bags)	10 units
1394-150-BS	1.5 mL, O-ring less Screwcap Tube, Conical Bottom	ed blue	500 tubes (20 tubes×25 bags)	10 units
1394-150-GS	1.5 mL, O-ring less Screwcap Tube, Conical Bottom Steriliz	ed green	500 tubes (20 tubes × 25 bags)	10 units
1394-150-RS	1.5 mL, O-ring less Screwcap Tube, Conical Bottom Steriliz	ed red	500 tubes (20 tubes×25 bags)	10 units
1394-150-YS	1.5 mL, O-ring less Screwcap Tube, Conical Bottom Steriliz	ed yellow	500 tubes (20 tubes×25 bags)	10 units
1394-150-LP-CS	1.5 mL, O-ring less Screwcap Tube attached Loop Cap, Conical Bottom Steriliz	ed clear	500 tubes (20 tubes×25 bags)	10 units





Material: Virgin Polypropylene (tube) Polyethylene (cap) Centrifugal force: 20,000 x G (water 1.0 mL / 15 minutes) Flat top (with marking space)





Real scale



(tube only) Length 45.6mm Maximum

Loop Cap

Cat. No. Unit 500 tubes (20 tubes×25 bags) 1394-150-SS-CS 1.5 mL, O-ring less Screwcap Tube, Self-standing clear 10 units 500 tubes (20 tubes×25 bags) 1394-150-SS-BS Sterilized 1.5 mL, O-ring less Screwcap Tube, Self-standing blue 10 units 500 tubes 1394-150-SS-GS 1.5 mL, O-ring less Screwcap Tube, Self-standing 10 units green (20 tubes × 25 bags) 500 tubes (20 tubes×25 bags) 1394-150-SS-RS 1.5 mL, O-ring less Screwcap Tube, Self-standing 10 units red 500 tubes (20 tubes × 25 bags) 1394-150-SS-YS 1.5 mL, O-ring less Screwcap Tube, Self-standing yellow 500 tubes (20 tubes×25 bags) 1394-150-SS-LP-CS 1.5 mL, O-ring less Screwcap Tube attached Loop Cap, Self-standing Sterilized 10 units



Material: Virgin Polypropylene (tube) Polyethylene (cap) Centrifugal force: 20,000 x G (water 1.5 mL / 15 minutes) Flat top (with marking space)





Real scale





Cat. No.	[tem		Cap color	Unit	Case
1394-200-CS	2.0 mL, O-ring less Screwcap Tube, Conical Bottom	Sterilized	clear	500 tubes (20 tubes×25 bags)	10 units
1394-200-BS	2.0 mL, O-ring less Screwcap Tube, Conical Bottom	Sterilized	blue	500 tubes (20 tubes×25 bags)	10 units
1394-200-GS	2.0 mL, O-ring less Screwcap Tube, Conical Bottom	Sterilized	green	500 tubes (20 tubes×25 bags)	10 units
1394-200-RS	2.0 mL, O-ring less Screwcap Tube, Conical Bottom	Sterilized	red	500 tubes (20 tubes×25 bags)	10 units
1394-200-YS	2.0 mL, O-ring less Screwcap Tube, Conical Bottom	Sterilized	yellow	500 tubes (20 tubes×25 bags)	10 units
1394-200-LP-CS	2.0 mL, O-ring less Screwcap Tube attached Loop Cap, Conical Bottom	Sterilized	clear	500 tubes (20 tubes×25 bags)	10 units



Material: Virgin Polypropylene (tube) Polyethylene (cap) Centrifugal force: 20,000 x G (water 1.5 mL / 15 minutes) Flat top (with marking space)









	Loop Cap
	-
(tube only) Length 45.2mm	
Maximum Diameter Φ10.6 mm	П

Cat. No.	Item		Cap color	Unit	Case
1394-200-SS-CS	2.0 mL, O-ring less Screwcap Tube, Self-standing	Sterilized	clear	500 tubes (20 tubes×25 bags)	10 units
1394-200-SS-BS	2.0 mL, O-ring less Screwcap Tube, Self-standing	Sterilized	blue	500 tubes (20 tubes × 25 bags)	10 units
1394-200-SS-GS	2.0 mL, O-ring less Screwcap Tube, Self-standing	Sterilized	green	500 tubes (20 tubes×25 bags)	10 units
1394-200-SS-RS	2.0 mL, O-ring less Screwcap Tube, Self-standing	Sterilized	red	500 tubes (20 tubes×25 bags)	10 units
1394-200-SS-YS	2.0 mL, O-ring less Screwcap Tube, Self-standing	Sterilized	yellow	500 tubes (20 tubes×25 bags)	10 units
1394-200-SS-LP-CS	2.0 mL, O-ring less Screwcap Tube attached Loop Cap, Self-standing	Sterilized	clear	500 tubes (20 tubes × 25 bags)	10 units

# Screwcap Tubes

### **Durable for** centrifugal force 20,000 xG\*



Our originally designed tube using 100% virgin medical-grade polypropylene proves resistance against a centrifugal force as high as 20,000 x G (water, 15 min, adapter used). \* 0.5mL Tube : 17,000 x G

# **Convenient for positioning** the tube when centrifugation



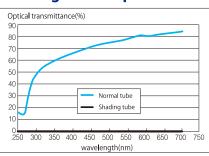
A marker (notch), which is convenient for positioning the tube during centrifugation and other purposes, is provided on the flange of the tube.

#### Resistant to the pressure and freeze



O- ring made of silicone rubber is resistant to the pressure and is suitable for storage in liquid nitrogen (vapor phase) or the deep freezer.

### Shading screwcap tube



This light-shielding screwcap tube is capable of thoroughly shielding light of short to long wavelengths and is best suited for use in experiments on sensitive samples, such as bilirubin, as well as their storage.

#### **Precautions: Handling Screwcap Tubes** under the Liquid Nitrogen

- 1. In terms of safety, store the screw cap tubes in the vapor phase.
- 2. To avoid any risks such as the tube rupture and the sample spatter, do NOT handle the screwcap tube under the liquid
- 3. Fill up the test sample into the body of the screwcap tube up to the degree of 90% of the maximum content.
- 4. Wear a face shield, protective clothes, and gloves when handling liquid nitrogen for defrosting.



Material: Virgin Polypropylene (tube, cap)

Silicone Rubber (O-ring: Please loosen the cap and autoclave) Centrifugal force: 17,000 x G (water 0.5 mL / 15 minutes) Flat top (with marking space)





Real scale

Cat. No.	Item	Unit	Case
139-105-111C	0.5 mL, Screwcap Tube, Self-standing, Natural (tube only)	500 tubes	10 bags
139-105-111BL	0.5 mL, Screwcap Tube for Shading, Self-standing, Black (tube only)	500 tubes	10 bags
1392-050-SS-LP-C	0.5 mL, Screwcap Tube attached Loop Cap, Self-standing, Natural	500 tubes	10 bags







Loop Cap

Ф13.2mm

Material: Virgin Polypropylene (tube, cap)

Silicone Rubber (O-ring: Please loosen the cap and autoclave) Centrifugal force: 20,000 x G (water 1.0 mL / 15 minutes) Flat top (with marking space)

Cat. No.	Item	Unit	Case
139-115-112C	1.5 mL, Screwcap Tube, Conical Bottom, Natural (tube only)	500 tubes	10 bags
139-115-112BL	1.5 mL, Screwcap Tube for Shading, Conical Bottom, Black (tube only)	500 tubes	10 bags
1392-150-LP-C	1.5 mL, Screwcap Tube attached Loop Cap, Conical Bottom, Natural	500 tubes	10 bags







50

Ф13.2mm



Material: Virgin Polypropylene (tube, cap) Silicone Rubber (O-ring: Please loosen the cap and autoclave) Centrifugal force: 20,000 x G (water 1.0 mL / 15 minutes) Flat top (with marking space)



Real scale

Cat. No.	ltem	Unit	Case
139-115-111C	1.5 mL, Screwcap Tube, Self-standing, Natural (tube only)	500 tubes	10 bags
139-115-111BL	1.5 mL, Screwcap Tube for Shading, Self-standing, Black (tube only)	500 tubes	10 bags
1392-150-SS-LP-C	1.5 mL, Screwcap Tube attached Loop Cap, Self-standing, Natural	500 tubes	10 bags











Material: Virgin Polypropylene (tube, cap) Silicone Rubber (O-ring: Please loosen the cap and autoclave)

Centrifugal force: 20,000 x G (water 1.5 mL / 15 minutes) Flat top (with marking space)





Real scale

Cat. No.	ltem	Unit	Case
139-120-112C	2.0 mL, Screwcap Tube, Conical Bottom, Natural (tube only)	500 tubes	10 bags
139-120-112BL	2.0 mL, Screwcap Tube for Shading, Conical Bottom, Black (tube only)	500 tubes	10 bags
1392-200-LP-C	2.0 mL, Screwcap Tube attached Loop Cap, Conical Bottom, Natural	500 tubes	10 bags





Ф13.2mm



Cat. No. 139-120-111C

139-120-111BL

1392-200-SS-LP-C

Material: Virgin Polypropylene (tube, cap)

Silicone Rubber (O-ring: Please loosen the cap and autoclave) Centrifugal force: 20,000 x G (water 1.5 mL / 15 minutes) Flat top (with marking space)

2.0 mL, Screwcap Tube for Shading, Self-standing, Black (tube only)

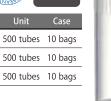
2.0 mL, Screwcap Tube attached Loop Cap, Self-standing, Natural

2.0 mL, Screwcap Tube, Self-standing, Natural (tube only)





Real scale





Shading

Loop Cap

Autoclavabl

# **Screwcaps**



#### 6 Colors

Material: Virgin Polypropylene (cap) Silicone Rubber (O-ring)



Material. Virgini dispropriete (edp) Silicone Nabber (o Ting)			
Cat. No.	ltem	Unit	Case
139-201C	Screwcap with O-ring, Natural	500 pieces	20 bags
139-201B	Screwcap with O-ring, Blue	500 pieces	20 bags
139-201G	Screwcap with O-ring, Green	500 pieces	20 bags
139-201R	Screwcap with O-ring, Red	500 pieces	20 bags
139-201Y	Screwcap with O-ring, Yellow	500 pieces	20 bags
139-201BL	Screwcap with O-ring, Black	500 pieces	20 bags

### Screwcap Opener





Easy to open the cap without direct touch by hand.



Material: Polycarbonate

	Unit
1	piece

### Piccolo Rack



The notch(Knurled area) is made both on the body of the Watson Screwcap Tube and on each of well of the Piccolo Rack so that the Screwcap Tube is completely fixed. Thus, the cap of the Screwcap Tube can be easily opened and closed with one hand (much easier to open by using Screwcap Opener).

Screwcap Opener, Natural

 $Dimensions: W118mm \times D82mm \times H52mm$ 

175**-**15C



**\***∶see below

Material: Polycarbonate

Cat. No.	ltem	Unit	Case
1522-2451	Piccolo Rack for 24 Screwcap Tubes, Clear	10 pieces	5 units

# Freezer Storage Racks





1577-850Y

Excellent storage racks in terms of its characteristics, heat-proof and crash-proof.

Conventional frozen preservation tube (to 2.0 mL) can be applied to and the plate can be piled up.

Dimensions: (50well) W146mm×D76mm×H55mm (81well) W131mm×D131mm×H52mm



\*:see below

10 units

Material: Polycarbonate (rack)
Polypropylene (plate)

Cat. No.	ltem	color	Unit	Case
1577 <b>-</b> 550B	Freezer Storage Rack for 50 Microtubes	Blue	10 pieces	10 units
1577 <b>-</b> 550G	Freezer Storage Rack for 50 Microtubes	Green	10 pieces	10 units
1577 <b>-</b> 550R	Freezer Storage Rack for 50 Microtubes	Red	10 pieces	10 units
1577 <b>-</b> 550W	Freezer Storage Rack for 50 Microtubes	White	10 pieces	10 units
1577-550Y	Freezer Storage Rack for 50 Microtubes	Yellow	10 pieces	10 units
1577 <b>-</b> 850B	Freezer Storage Rack for 81 Microtubes	Blue	10 pieces	10 units
1577 <b>-</b> 850G	Freezer Storage Rack for 81 Microtubes	Green	10 pieces	10 units
1577 <b>-</b> 850R	Freezer Storage Rack for 81 Microtubes	Red	10 pieces	10 units
1577 <b>-</b> 850W	Freezer Storage Rack for 81 Microtubes	White	10 pieces	10 units

Freezer Storage Rack for 81 Microtubes

Note:(\*)Repeated autoclaving may cause rack damaged.

10 pieces

Yellow

# **Cryotubes**

# Vial for cryopreservation in the vapor phase of liquid nitrogen

#### Cap lock mechanism



Tube has small protrusion on both of body and cap. As a result, this tube has high sealing effect and it's possible to prevent sample leakage.

#### Can fill liquid sample to the maximum capacity



The scale is marked on the body. It's possible to fill liquid maximum capacity.

#### Characteristic **Bottom shape**



Idle rotation is prevented by characteristic bottom shape when using this.

#### Flat Cap



Writing space is available on the cap

#### Cryotubes with Internal Thread Screwcaps









(tube only) Length 28.5 mm Maximum Φ12.4 mm













Able to store tube by using cane.

Material: Polypropylene (tube) Polyethylene (cap)

\*1 tube opener as tube accessories is attached per 500 tubes.





Cat. No.	Item		Unit	Case
1396-1015	1.0mL Cryotubes with Internal Thread Screwcaps, Self-standing	erilized )	20 pieces / bag	25 bags
1396-2015	2.0mL Cryotubes with Internal Thread Screwcaps, Self-standing	erilized	20 pieces / bag	25 bags

### **Cryotubes with External Thread Screwcaps**







-	Cat. No.	ltem	Unit	Case
	1396 <b>-</b> 100S	1.0mL Cryotubes with External Thread Screwcaps, Self-standing Sterilized	20 pieces / bag	25 bags
	1396-200S	2.0mL Cryotubes with External Thread Screwcaps, Self-standing Sterilized	20 pieces / bag	25 bags

# Cryotube Cap Opener for Internal Thread

Internal Thread type is able to be closed tightly to have high sealing effect. However, there are cases that Internal Thread type close too tightly to open by hand.

At the time, Internal Thread type is able to be opened easily by using this opener.

Easy to open the cap without direct touch by hand.

\*Only use for Cryotube with Internal Thread (1396-101S, 1396-201S).







There are grooves that is able to grip the cap certainly.



#### Material: Polypropylene

Cat. No.	ltem	Unit
175-20B	Cryotube Cap Opener for Cryotubes with Internal Thread	5 pieces / bag

# Cryotube Boxes

The cryotube box for 40 tubes.

\* NOT Autoclavable



#### Material: Styrene Resin

Cat. No.	ltem	Unit	Case
1568-100	Cryotube Box for 40 tubes, 1.0 mL	10 pieces	5 units
1568-200	Cryotube Box for 40 tubes, 2.0 mL	10 pieces	5 units