

Consistent. Reproducible. Standardized.

CoolRack™

Error-Free /
Cooling & Freezing



CoolBox™

Ice-Free /
Sample Handling



CoolCell™

Alcohol-Free /
Cell Freezing



CoolRack

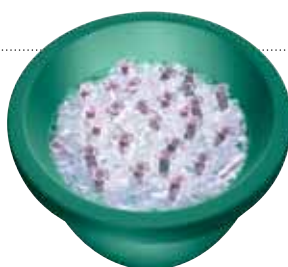
Cool*[®]Rack {kool-rak} (v), -ing, -ed.

1. to cool, freeze, snap-freeze, thaw or heat bio-medical samples in an organized and standardized manner.

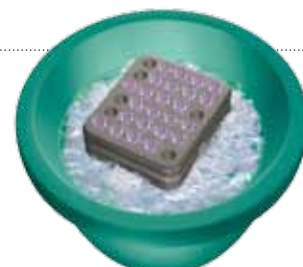
Error-Free



PROBLEM



SOLUTION



CoolRack CF45 in dry ice



CoolRack and ThermalTray in water bath



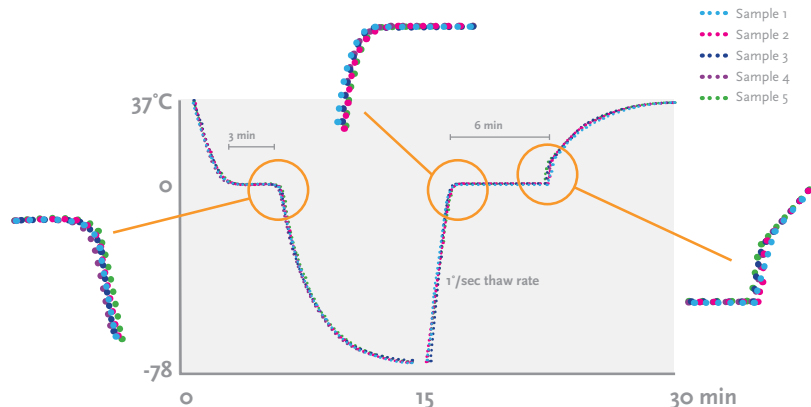
CoolSystem Thermo-conductive ThermalTray platform supports all CoolRack modules and keeps samples at ice temperature (0.5°C to 4°C) for up to 14 hours. Samples stay within 0.1°C temperature uniformity and are elevated, away from hazards associated with ice contact.

Organized and Protected CoolRacks rapidly equilibrate to any temperature they contact. Index, organize and protect samples in ice, dry ice, liquid nitrogen, water baths or any other lab temperature source. Get the benefit of the temperature without the mess!

Cool, (Snap)Freeze or Thaw Insert sample in a CoolRack instead of directly immersing into ice, dry ice, liquid nitrogen or water baths. CoolRacks provide temperature consistency and high reproducibility during cooling, (snap)freezing or thawing procedures, eliminating one often-overlooked variable.

Modular and Versatile CoolRacks accommodate a wide variety of tubes and plates and adapt to any temperature from -200°C through 100°C+. Ideal for a wide range of laboratory applications from collection to processing to transport.

REPRODUCIBILITY—IT'S ALL ABOUT THE CURVES



Repetitive freeze/thaw cycles show consistency

A 2ml cryo vial filled with 1.8ml water placed in a CoolRack CF45 and snap-frozen in dry ice then thawed in the same CoolRack in a 37°C water bath. Five consecutive freeze/thaw cycles illustrate the highly reproducible freezing and thawing profiles and uniform phase transition.

CoolRack



CoolSink



Platforms



FEATURES:

- Highly reproducible cooling, (snap)freezing and thawing reduces user error
- Rapid thermo-conductivity through patented aluminum-alloy construction
- Maintains temperature indefinitely when placed in direct contact with ice, dry ice, LN₂, water bath, heat block, incubator, oven
- Precision-engineered for superior tube/plate fit and optimal thermal transfer
- -200°C to 100°C+ temperature range
- Type III hard anodized surface to prevent corrosion and rust
- Autoclavable, high-heat sterilizable, or clean with bleach, RNase Away, common lab detergents and disinfectants

CoolRack	Well Shape	Tube / Plate Type	Number of wells							
			4	9	15	30	45	90	96	384
1 CoolRack M	cylindrical	microcentrifuge tube, 1.5ml or 2.0ml			x	x ¹	x	x	x ³	
2 CoolRack M-PF	profile-fit	microcentrifuge tube, 1.5ml only			x	x ¹				
3 CoolRack 500ul	profile-fit	microcentrifuge tube, 500ul only				x ¹				
4 CoolRack CF	cylindrical	cryo and FACS tubes, 12.5mm dia			x	x ¹	x			
5 CoolRack PCR	profile-fit	PCR plates, tubes, strips, 200ul wells							x ²	x ²
6 CoolRack 15ml	cylindrical	centrifuge tubes, 15ml conical		x ²						
7 CoolRack 50ml	cylindrical	centrifuge tubes, 50ml conical	x ²							
8 CoolRack 1ml	cylindrical	1.4ml storage tubes (Matrix®, Micronics®)							x ²	
9 CoolRack MassSpec	cylindrical	mass spec vials, 300ul & 700ul, 11mm dia				x ¹				
10 CoolRack V13mm	cylindrical	Vacutainer® tubes, 13mm		x ²						
11 CoolRack VS13mm	cylindrical	Vacutainer® tubes, 13mm, short		x ²						
12 CoolRack V16mm	cylindrical	Vacutainer® tubes, 16mm		x ²						

CoolSink	Surface	Plate Type
13 CoolSink 48 **	SBS footprint, flat	6-, 12-, 24-, 48-well plates
14 CoolSink 96U **	SBS footprint, 96 wells	96-well u-bottom plates
15 CoolSink 96F **	SBS footprint, flat	96-well flat-bottom plates

Platforms	Surface
16 ThermalTray LP	rectangular, low profile
17 ThermalTray HP	rectangular, high profile
18 CoolTray	round

¹ fits CoolBox 30 ice-free cooling container ² fits CoolBox MP ice-free cooling container ³ Compatible with adjustable spacing multi-channel pipettors

CoolBox

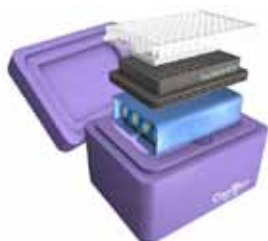
Cool*Box {kool-bocks} (v), -ing, -ed.

1. To cool or freeze bio-medical samples in an ice-free, portable container while maintaining uniform temperatures to all samples.

Ice-Free



CoolBox 30 System
accommodates all 30-well
CoolRack tube holder
modules



CoolBox Microplate System
accommodates all CoolRack
and CoolSink SBS-format
plate and tube modules

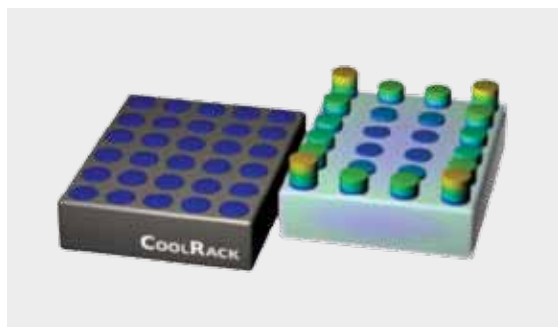
Ice-Free Cooling and Freezing Keep tubes and plates cold or frozen on the benchtop in a compact, versatile and portable CoolBox. Insert your CoolRack or CoolSink module and samples will stay cold or frozen for up to ten hours through the use of interchangeable, reusable cartridges. All wells stay at a consistent 0.1°C temperature uniformity throughout the cooling period eliminating worries of edge-effect.

Snap-Freezing In addition to cooling and freezing with cartridges, CoolBox can be used with dry ice or LN2 to create a compact, portable cryogenic freezing station. Rest a CoolRack module on dry ice or LN2 and get improved work flow and high levels of consistency and reproducibility in snap-freezing procedures.

Collect and Process CoolBox instantly organizes, protects and standardizes tube and plate sample collection and handling. Compared to directly immersing samples into ice, dry ice or LN2, CoolBox provides a compact and clean workstation while delivering highly reproducible cooling and freezing results.

Modular and Versatile CoolBox 30 System accommodates all 30-well CoolRack tube modules. CoolBox Microplate System accommodates all CoolRack and CoolSink SBS-format plate and tube modules. Mix and match for use with a variety of tubes and plates at five different temperatures.

COOLBOX VS GEL-FILLED PLASTIC



CoolBox/CoolRack well temperature uniformity is unparalleled with <0.1°C variation across all wells

Conventional Gel-filled plastic coolers vary up to 4.3 °C from outer to center wells

COOLBOX / DRY ICE AND LN2



CoolBox/Dry Ice Achieve 6 hours at -78°C with 200cc dry ice under CoolRack

CoolBox/LN2 Maintain LN2 level halfway up 15-well CoolRack for indefinite -150°C freezing time

CoolBox 30 System



CoolBox Microplate System



FEATURES:

- Constructed out of highly durable cross-linked dense polyethylene foam
- Use with ice-free cartridges, wet ice, dry ice, liquid nitrogen or standard gel packs
- +2°C and -12°C cartridges are reusable and can be recharged in a -20°C freezer
- Clean with aqueous detergents, alcohol, bleach or acid/base viricides. Do not autoclave.
- Excellent resistance to fluid absorption, surface abrasion and rust
- For labeling, use lab markers or tape. Repeated application and removal of tape will not affect surface

CoolBox 30 System includes CoolBox, lid, blue +2°C cartridge, insulator pad. Can be purchased separately or with one of the following CoolRack combinations:

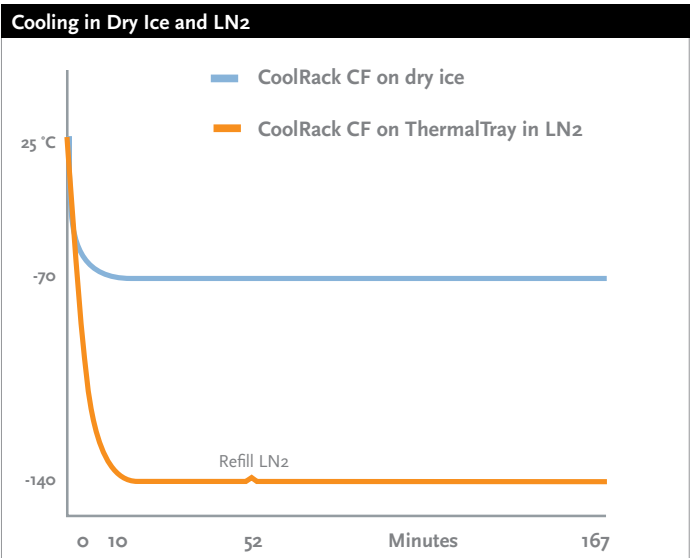
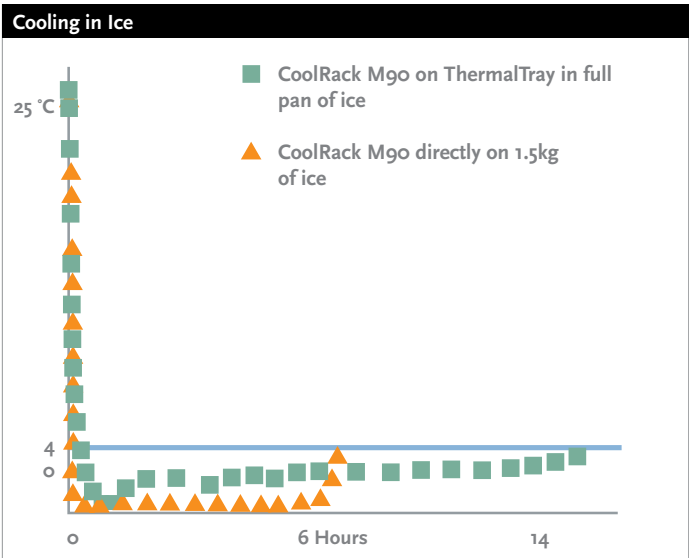
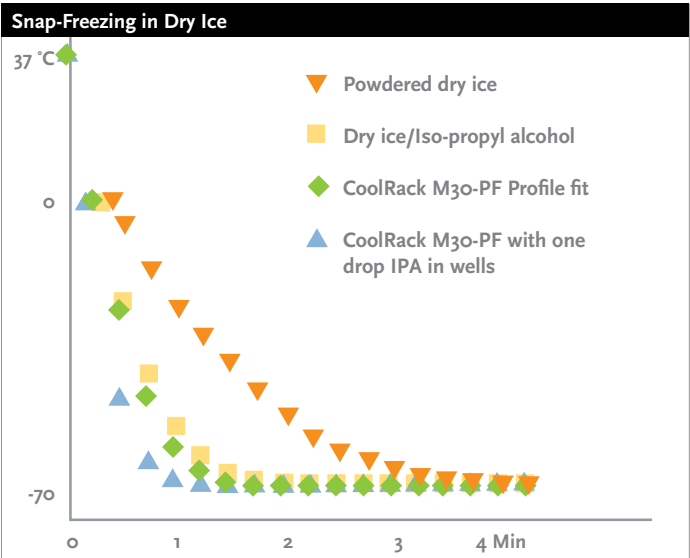
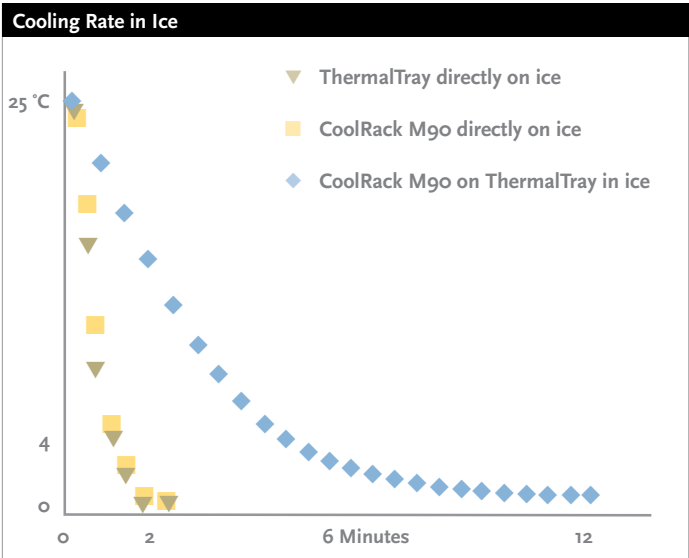
CoolBox 30 System	Number of Samples	Tube Types
1 M30 CoolBox System	30	1.5ml or 2.0ml microcentrifuge tubes
2 M30PF CoolBox System	30	1.5ml conical microcentrifuge tubes
3 CF30 CoolBox System	30	cryovials, FACS tubes
4 CFT30 CoolBox System	30	cryovials (locking wells to allow one-handed opening and closing)

CoolBox Microplate System includes CoolBox, lid, blue +2°C cartridge. Can be purchased separately or with one of the following CoolSink and CoolRack combinations:

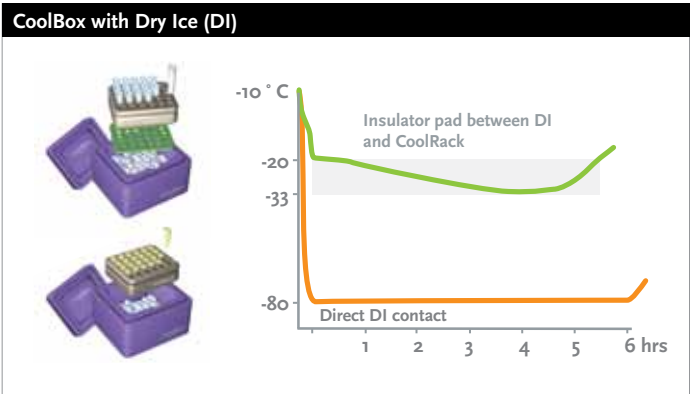
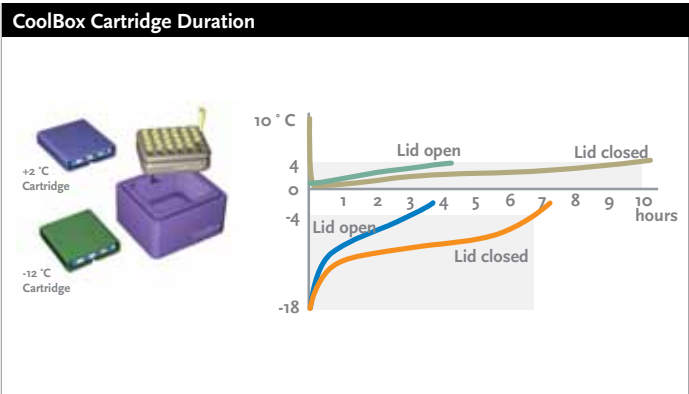
CoolBox Microplate System	Number of Samples	Tube/Plate Type
5 PCR96 CoolBox System	96	0.2ml PCR tubes, SBS format plates, strips
6 PCR384 CoolBox System	384	384-well PCR plate, SBS format
7 96F CoolBox System	96	96-well flat-bottom SBS format plate
8 96U CoolBox System	96	96-well u-bottom SBS format plate
9 1mlx96 CoolBox System	96	1.4ml storage tubes (such as Matrix®, Micronics®, National Scientific®)

CoolRack & CoolBox Performance Data:

CoolRack



CoolBox



CoolCell

Cool*Cell {kool-sel} (v), -ing, -ed.

1. To freeze cells or cell lines at $-1^{\circ}\text{C}/\text{minute}$ without alcohol, variability, maintenance or hazardous waste while achieving consistently high post-thaw cell viability and function.

Alcohol-Free

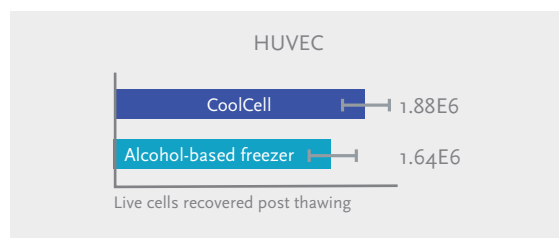
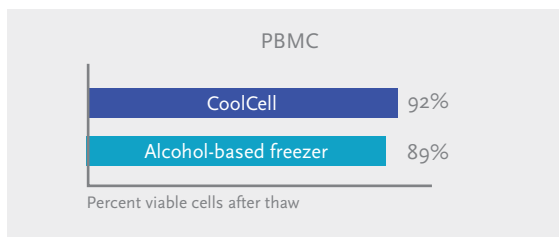


$-1^{\circ}\text{C}/\text{minute}$ Alcohol-free Cell Freezing Alcohol-free means no fluids, no on-going expense, no maintenance, no waste and no variability in freeze runs.

Highly Reproducible With CoolCell each freeze run profile is exactly the same. The solid core design never varies in cooling rate and, unlike alcohol-filled containers, the insulated design provides repeatable, constant cooling throughout the freezing period.

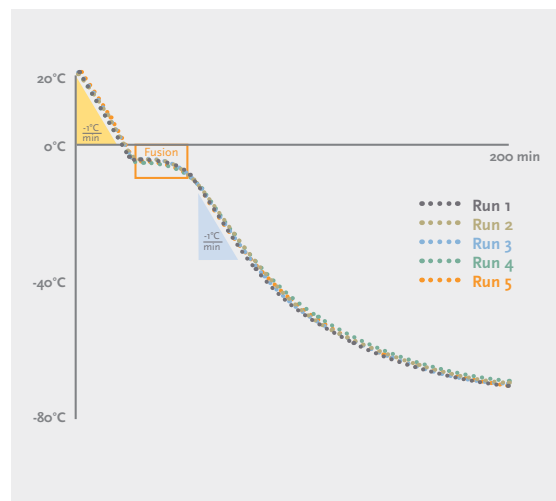
Improved Work Flow CoolCell is ready to use “off the shelf” and is ready again just minutes after a freeze cycle. Freeze up to 12 screw cap 1ml or 2ml cryo vials. The insulated design protects hands when removing from the -80°C freezer. No frosty fingers. No stuck lids.

CELL VIABILITY



Equal or better cell viability than alcohol containers

REPRODUCIBILITY



Five consecutive freeze cycles show freezing consistency

CryoPrep System provides ice-free cold cryo vial preparation and alcohol-free cell freezing. **CoolBox CFT30** keeps up to 30 cryo vials at ice temperature while allowing one-handed opening and closing of seated vials. Prepared vials are placed in the **CoolCell** for alcohol-free highly reproducible freezing in a -80°C freezer or dry ice locker.

CoolRack M microcentrifuge tube modules		
BCS-125	CoolRack M15	15 wells, 1.5ml and 2.0ml tubes, 10L x 6.5W x 3.8H cm, 0.4kg
BCS-108	CoolRack M30	30 wells, 1.5ml and 2.0ml tubes, 15L x 12.5W x 7.5H cm, 0.9kg
BCS-102	CoolRack M90	90 wells, 1.5ml and 2.0ml tubes, 27L x 11.3W x 3.8H cm, 2.3kg
BCS-116	CoolRack M96 ID	96 wells, 1.5ml and 2.0ml tubes, row/column indexing, 25.4L x 15.24W x 3.8H cm, 3.5kg
BCS-127	CoolRack M15-PF	15 wells, profile fit, 1.5ml conical tubes, 10L x 6.5W x 3.8H cm, 0.4kg
BCS-128	CoolRack M30-PF	30 wells, profile fit, 1.5ml conical tubes, 15L x 12.5W x 7.5H cm, 0.9kg
BCS-137	CoolRack 500ul M30-PF	30 wells, profile fit, 0.5ml conical tubes, 15L x 12.5W x 7.5H cm, 0.9kg
CoolRack 15ml and 50ml centrifuge tubes		
BCS-153	CoolRack 15ml	9 wells, 15ml centrifuge tubes, 8.9L x 8.9W x 1.12H cm, 1.72kg
BCS-154	CoolRack 50ml	4 wells, 50ml centrifuge tubes, 8.9L x 8.9W x 1.07H cm, 1.48 kg
CoolRack CF cryo and FACS tube modules		
BCS-126	CoolRack CF15	15 wells, 12.5mm dia., 10L x 6.5W x 3.8H cm, 0.4kg
BCS-129	CoolRack CF30	30 wells, 12.5mm dia., 15L x 12.5W x 7.5H cm, 0.9kg
BCS-105	CoolRack CF45	45 wells, 12.5mm dia., 17L x 9.5W x 3.8H cm, 1.2kg
BCS-138	CoolRack CFT30	30 wells, locking wells for one-hand open/close, 12.5mm dia., 15L x 12.5W x 7.5H cm, 0.9kg
CoolRack PCR tubes, strips and plate modules		
BCS-120	CoolRack PCR96	96 wells, profile fit, 0.2ml tubes, strips and plates, 13.3 L x 8.8W x 2.5H cm, 0.6kg
BCS-139	CoolRack PCR384	384 wells, profile fit, 384-well plates, 5.2L x 3.5W x 0.7H, 0.75kg
CoolRack MassSpec tube modules		
BCS-140	CoolRack MassSpec	30 wells, 300ul and 700ul tubes, 11mm dia., 15L x 12.5W x 7.5H cm, 0.9kg
BCS-149	CoolRack 1mlx96	96 deep wells, 1.4ml Matrix, Micronics, National Scientific storage tubes, 5.2L x 3.5W x 0.7H, 1kg
CoolSink assay and microtiter plate holders		
BCS-101	CoolSink 48	6-, 12-, 24-, 48-well plates, 5.2L x 3.5W x 0.7H, 0.75kg
BCS-106	CoolSink 96F	96 well flat-bottom plates, 5.2L x 3.5W x 0.7H, 0.75kg
BCS-107	CoolSink 96U	96 well round-bottom plates, 5.2L x 3.5W x 0.7H, 0.75kg
ThermalTray thermo-conductive platforms		
BCS-104	ThermalTray, High Profile	For use in 9L ice pan or water bath, 27L x 15W x 10H cm, 1.8kg
BCS-123	ThermalTray, Low Profile	For use in 9L ice pan or water bath, 27L x 15W x 5L cm, 1.6kg
BCS-124	CoolTray	For use in 4L round ice bucket, 12.5H x 18.4dia cm, 1.8kg
CoolSystem kits		
BCS-117	M90 CoolSystem	Includes ThermalTray LP, CoolRack M90, 9L ice pan, 39L x 33W x 11H cm, 4.5kg
BCS-118	M30x3 CoolSystem	Includes ThermalTray LP, CoolRack M30 (qty 3), 9L ice pan, 39L x 33W x 11H cm, 5kg
BCS-119	CF CoolSystem	Includes ThermalTray LP, CoolRack CF45, 9L ice pan, 39L x 33W x 11H cm, 3.2kg
BCS-121	PCR96 (1) Cool-System	Includes ThermalTray LP, CoolRack PCR96 (qty 1), 9L ice pan, 39L x 33W x 11H cm, 3.2kg
BCS-122	PCR96 (3) Cool-System	Includes ThermalTray LP, CoolRack PCR96 (qty 3), 9L ice pan, 39L x 33W x 11H cm, 3.8kg

Products made in the USA.



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CoolRack VT 13mm and 16mm Vacutainer tubes		
BCS-155	CoolRack V13mm	9 wells, 13x100mm Vacutainer tubes, 8.9Lx 8.9W x 8.9H cm, 1.56 kg
BCS-156	CoolRack V16mm	9 wells, 16x100 Vacutainer tubes, 8.9L x 8.9W x 8.9H cm, 1.42 kg
BCS-157	CoolRack VS13mm	9 wells, 13x75mm Vacutainer tubes, 8.9L x 8.9W x 6.6H cm, 1.16 kg
CoolBox 30 System ice-free tube cooling and freezing		
BCS-130	CoolBox 30 System	Includes CoolBox with lid, blue +2°C cartridge, red stage, insulator pad. Accommodates all 30-well CoolRack tube modules. 16.5L x 15.3W x 12.8H cm, .5kg
BCS-133	M30 CoolBox System	Includes CoolBox 30 System, CoolRack M30, 16.5L x 15.3W x 12.8H cm, 1.4kg
BCS-134	M30PF CoolBox System	Includes CoolBox 30 System, CoolRack M30-PF, 16.5L x 15.3W x 12.8H cm, 1.4kg
BCS-135	CF30 CoolBox System	Includes CoolBox 30 System, CoolRack CF30, 16.5L x 15.3W x 12.8H cm, 1.4kg
BCS-166	CFT30 CoolBox System	Includes CoolBox 30 System, CoolRack CFT30, 16.5L x 15.3W x 12.8H cm, 1.4kg
BCS-131	-12°C cartridges, green (qty 3)	Re-chargeable cartridges for CoolBox 30 System, 10.6L x 10W x 2.5H cm, .5kg
BCS-132	+2°C cartridges, blue (qty 3)	Re-chargeable cartridges for CoolBox 30 System, 10.6L x 10W x 2.5H cm, .5kg
CoolBox Microplate System ice-free plate cooling		
BCS-144	CoolBox Microplate System	Includes CoolBox with lid, blue +2°C cartridge. Accommodates all CoolRack and CoolSink SBS-footprint tube and plate modules, 18.5L x 12.8W x 12.8H cm, 0.75kg
BCS-145	PCR96 CoolBox System	Includes CoolBox Microplate System, CoolRack PCR96, 18.5L x 12.8W x 12.8H cm, 1.5kg
BCS-146	PCR384 CoolBox System	Includes CoolBox Microplate System, CoolRack PCR384, 18.5L x 12.8W x 12.8H cm, 1.5kg
BCS-147	96F CoolBox System	Includes CoolBox Microplate System, CoolSink 96F, 18.5L x 12.8W x 12.8H cm, 1.5kg
BCS-148	96U CoolBox System	Includes CoolBox Microplate System, CoolSink 96U, 18.5L x 12.8W x 12.8H cm, 1.5kg
BCS-151	1mlx96 CoolBox System	Includes CoolBox Microplate System, CoolRack 1mlx96, 18.5L x 12.8W x 12.8H cm, 1.5kg
BCS-152	+2°C cartridge, blue (qty 1)	Re-chargeable cartridges for CoolBox Microplate System, 12L x 8.9W x 3.8H cm, 1kg
CoolCell and CryoPrep alcohol-free cell freezing container		
BCS-136	CoolCell, -1°C/min cell freezer	Alcohol-free cell freezing container, 12 x 2ml cryo vial capacity, 12dia x 11h, 0.5kg
BCS-142	CryoPrep System	Includes CoolCell (qty 1), CFT30 CoolBox System (qty 1)
Accessories		
BCS-111	Ice pan, maxi 9L, green	For use with ice, dry ice, LN2. 39L x 33W x 11H cm, 1kg
BCS-112	Ice pan, maxi 9L, red	For use with ice, dry ice, LN2. 39L x 33W x 11H cm, 1kg
BCS-113	Ice pan, midi 4L, green	For use with ice, dry ice, LN2. 32L x 25W x 12H cm, 0.5kg
BCS-114	Ice pan, midi 4L, red	For use with ice, dry ice, LN2. 32L x 25W x 12H cm, 0.5kg
BCS-115	Ice bucket,round 4L, green	For use with ice, dry ice, LN2. 17H x 25dia cm, 0.5kg
BCS-143	Temperature Strip, LCD, 1-8°C (qty 3)	For use with all thermo-conductive modules, 10.2L x 1.3W cm
BCS-141	CoolMat (qty 4)	For use with ThermalTray HP and LP. 39L x 33W cm

“BioCision has now eliminated the ice factor...”

—Fraser M., Case Western Reserve University

“Overall, the CoolCell has proven to us to set a new bar in cryopreservation.”

—Rohit G., Stanford University

“The CoolBox was especially helpful in the transport of fresh biopsies on dry ice from one location to another.”

—Laura M. Sarah Canon Research Institute (SCRI)

“This product completely revolutionizes tube racks. I obviously love it!”

—Ward K., Genentech

“Not only do these tools keep your samples chilled for hours, but they also keep everything organized, safe, and secure.”

—Steffan V., Genentech