

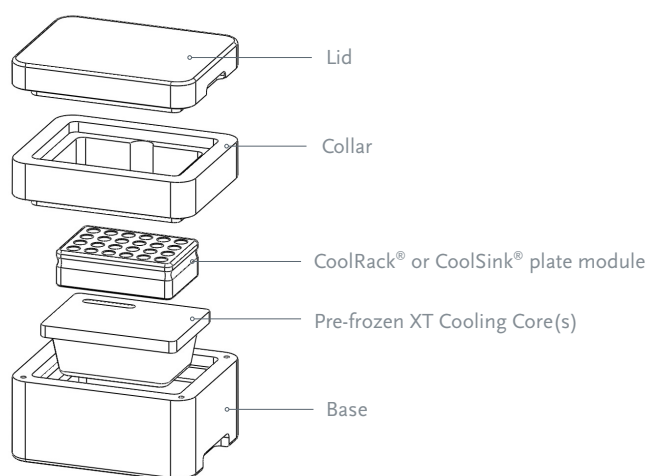
CoolBox™

Ice-Free Cooling and Freezing

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CoolBox™ ice-free systems are bench top cooling workstations that provide sample cooling or freezing without ice, electricity or batteries. CoolBox systems are versatile and accommodate a variety of sample formats and temperatures. The modular design enables the use of CoolRack® and CoolSink® thermo-conductive sample modules to hold microfuge tubes, cryogenic vials, PCR tubes or plates, assay plates and more.



How It Works

- Freeze the XT Cooling Core in -20°C freezer
- Place frozen core in base
- Rest CoolRack or CoolSink module on core
- Module will equilibrate and maintain temperature via thermo-conductivity

How to Configure a CoolBox™ Ice-free System

	1. Identify Tube or Plate	2. Choose CoolRack® or CoolSink® Module	3. Choose CoolBox™ capacity and color
Example 1	up to 24 microcentrifuge tubes	 CoolRack® XT M24	 CoolBox™ XT
Example 2	up to 48 microcentrifuge tubes	 2 x CoolRack® XT M24	 CoolBox™ 2XT
Example 3	24 microcentrifuge tubes and one PCR plate, 12 PCR strips, or 0.2 mL PCR tubes	 CoolRack® XT M24 + CoolRack® XT PCR96	 CoolBox™ 2XT

Choose Your CoolRack® Module



XT Starter CoolBox XT CoolBox 2XT CoolBox 30



Open	4 hr	10 hr	10 hr	4 hr
Closed	--	16 hr	16 hr	10 hr

Microfuge tube modules: CoolRack® M

For Use With	Wells	Well Shape	Dimensions (L x W x H)	Well Dia.	Well Depth	Description	Item No.	Capacity			
1.5 mL or 2.0 mL tubes	6	Cylindrical	6.0 x 4.3 x 3.8 cm	11.1 mm	32.7 mm	CoolRack M6	BCS-163	1	up to 3	up to 8	up to 2
1.5 mL or 2.0 mL tubes	15	Cylindrical	10.2 x 6.4 x 3.8 cm	11.1 mm	32.7 mm	CoolRack M15	BCS-125	1	1	up to 4	1
1.5 mL conical tubes	15	Conical	10.2 x 6.4 x 3.8 cm	11.1 mm	35.3 mm	CoolRack M15-PF	BCS-127	1	1	up to 4	1
1.5 mL or 2.0 mL tubes	24	Cylindrical	12.8 x 8.5 x 3.8 cm	11.1 mm	32.7 mm	CoolRack XT M24*	BCS-535	1	1	up to 2	--
5.0 mL centrifuge tubes	12	Conical	12.7 x 8.6 x 5.0 cm	16.5 mm	48.7 mm	CoolRack XT 5ml*	BCS-539	1	1	up to 2	--
1.5 mL or 2.0 mL tubes	30	Cylindrical	12.0 x 10.2 x 3.8 cm	11.1 mm	32.7 mm	CoolRack M30	BCS-108	1	--	up to 2	1
1.5 mL conical tubes	30	Conical	12.0 x 10.2 x 3.8 cm	11.1 mm	35.3 mm	CoolRack M30-PF	BCS-128	1	--	up to 2	1
500 µL conical tubes	30	Conical	12.0 x 10.2 x 3.8 cm	11.1 mm	35.3 mm	CoolRack M30-PF 500µL	BCS-137	1	--	up to 2	1

Cryogenic vial and FACS tube modules: CoolRack® CF

For Use With	Wells	Well Shape	Dimensions (L x W x H)	Well Dia.	Well Depth	Description	Item No.	Capacity			
cryogenic vials or FACS tubes	15	Cylindrical	10.2 x 6.4 x 3.8 cm	12.7 mm	32.7 mm	CoolRack CF15	BCS-126	1	1	up to 4	1
cryogenic vials or FACS tubes	24	Cylindrical	12.8 x 8.5 x 3.8 cm	12.7 mm	32.7 mm	CoolRack XT CFT24*	BCS-534	1	1	up to 2	--
cryogenic vials or FACS tubes	30	Cylindrical	12.0 x 10.2 x 3.8 cm	12.7 mm	32.7 mm	CoolRack CFT30*	BCS-138	1	--	1	1
cryogenic vials or FACS tubes	45	Cylindrical	17.3 x 9.7 x 3.8 cm	12.7 mm	32.7 mm	CoolRack CF45	BCS-105	--	--	1	--

PCR plate, strip well or tube modules: CoolRack® PCR

For Use With	Wells	Well Shape	Dimensions (L x W x H)	Well Dia.	Well Depth	Description	Item No.	Capacity			
One 96-well PCR plate, strip wells, 0.2mL tubes	96	Tapered	12.7 x 8.6 x 2.5 cm	-	13.2 mm	CoolRack XT PCR96*	BCS-529	1	1	up to 2	--
6 strip wells and 12 x 1.5 or 2.0 mL microfuge tubes	48 ^(PCR) 12 ^(M)	Tapered ^(PCR) Cylindrical ^(M)	12.7 x 8.6 x 3.8 cm	- 11.1 mm	13.2 mm 32.7 mm	CoolRack XT M-PCR*	BCS-523	1	1	up to 2	--
One 384-well PCR plate	384	Tapered	12.7 x 8.6 x 1.9 cm	-	7.6 mm	CoolRack XT PCR384*	BCS-538	1	1	up to 2	--

2D barcode storage tube modules: CoolRack® g6

For Use With	Wells	Well Shape	Dimensions (L x W x H)	Well Dia.	Well Depth	Description	Item No.	Capacity			
0.5 mL 2D storage tubes	96	Cylindrical	13.1 x 8.9 x 3.6 cm	8.4 mm	24.6 mm	CoolRack 96x0.5ml	BCS-231	1	1	up to 2	--
1.4 mL 2D storage tubes	96	Cylindrical	13.2 x 8.9 x 4.3 cm	11.1 mm	32.7 mm	CoolRack 96x1ml	BCS-149	1	1	up to 2	--

Cell therapy injectable ampule modules: CoolRack® SV

For Use With	Wells	Well Shape	Dimensions (L x W x H)	Well Dia.	Well Depth	Description	Item No.	Capacity			
2.0 mL injectable cell therapy ampules	12	Cylindrical	12.7 x 8.6 x 3.8 cm	16.0 mm	24.0 mm	CoolRack SV2	BCS-266	1	1	up to 2	--
10.0 mL injectable cell therapy ampules	12	Cylindrical	12.7 x 8.6 x 3.8 cm	23.6 mm	27.9 mm	CoolRack SV10	BCS-265	1	1	up to 2	--

Tall tube modules: CoolRack® 15ml, CoolRack® 50ml, CoolRack® 250ml

For Use With	Wells	Well Shape	Dimensions (L x W x H)	Well Dia.	Well Depth	Description	Item No.	Capacity			
15 mL centrifuge tubes	12	Cylindrical	13.7 x 9.5 x 11.8 cm	17.5 mm	105.4 mm	CoolRack L [▷]	BCS-232	1	1*	up to 2*	--
15 mL centrifuge tubes	9	Cylindrical	8.9 x 8.9 x 10.7 cm	17.1 mm	106.7 mm	CoolRack 15ml	BCS-153	1	1*	up to 2*	--
50 mL centrifuge tubes	4	Cylindrical	8.9 x 8.9 x 10.7 cm	29.5 mm	101.6 mm	CoolRack 50ml	BCS-154	1	1*	up to 2*	--
250 mL centrifuge tube	1	Conical	8.9 x 8.9 x 14.0 cm	60.4 mm	133.3 mm	CoolRack 250ml-PF	BCS-532	1	1*	up to 2*	--

Blood collection tube modules: CoolRack® V

For Use With	Wells	Well Shape	Dimensions (L x W x H)	Well Dia.	Well Depth	Description	Item No.	Capacity			
13 mm or 16 mm blood tubes	12	Cylindrical	13.7 x 9.5 x 9.6 cm	16.6 mm	83.3 mm	CoolRack LV [▷]	BCS-235	1	1*	up to 2*	--
13x75 mm blood tubes	9	Cylindrical	8.9 x 8.9 x 6.1 cm	13.0 mm	61.0 mm	CoolRack VS13	BCS-157	1	1*	up to 2*	--
13x100 mm blood tubes or 5 mL cryogenic vials	9	Cylindrical	8.9 x 8.9 x 8.4 cm	13.0 mm	83.8 mm	CoolRack V13	BCS-155	1	1*	up to 2*	--
16x100 mm blood tubes	9	Cylindrical	8.9 x 8.9 x 8.4 cm	16.0 mm	83.8 mm	CoolRack V16	BCS-156	1	1*	up to 2*	--

*SBS-compatible * "gripping" wells for one-hand vial opening/closing [▷] Thermo-conductive base and insulative exterior

* Requires extension collar accessory for closed lid cooling

Choose Your CoolBox™ System



	XT Starter	CoolBox XT & 2XT	CoolBox 30
Holds Tubes	●	●	●
Holds Plates	●	●	n/a
0.5° - 4°C cooling with lid open	4 hours	10 hours	4 hours
0.5° - 4°C cooling with lid closed	n/a	16 hours	10 hours
<0°C freezing with lid open	n/a	5 hours	3 hours
<0°C freezing with lid closed	n/a	8 hours	6 hours

XT Starter

An open-platform ice-free cooler that accommodates most CoolRack® and CoolSink® modules. Low profile and small footprint make it ideal for use in the hood, keeping samples cold (0.5° to 4.0°C) up to four hours. 1°C to 8°C temperature indicator provides visual assurance of temperature performance. To extend the cooling duration, keep an additional XT Cooling Core in the freezer and rotate the Cores as needed.



Item No.	Description	Dimensions (L x W x H)
BCS-504	● XT Starter, complete, purple	External: 16.2 x 12.1 x 6.1 cm
BCS-513	● XT Starter Holder only, purple	
BCS-511	● XT Cooling Core only	

CoolBox™ XT or CoolBox 2XT System

Keep sample tubes or plates cold for over 16 hours with the lid on, and over 10 hours with the lid off. Use optional XT Freezing Core to maintain frozen samples for over 8 hours. Dry ice may be used in place of the cores to create a compact snap freezing workstation.



CoolBox™ XT System

Includes: CoolBox XT base, collar, lid and (1) XT Cooling Core for 0.5° to 4°C cooling.

Item No.	Description	Dimensions (L x W x H)
BCS-502	● CoolBox XT, purple	Internal: 14.0 x 9.4 x 9.9 cm* External: 20.0 x 16.0 x 15.0 cm
BCS-502G	● CoolBox XT, green	
BCS-502O	● CoolBox XT, orange	
BCS-502PK	● CoolBox XT, pink	

*Internal height of open space when core is in the base.



CoolBox™ 2XT System

Includes: CoolBox 2XT base, collar, lid and (2) XT Cooling Cores for 0.5° to 4°C cooling.

Item No.	Description	Dimensions (L x W x H)
BCS-503	● CoolBox 2XT, purple	Internal: 21.0 x 14.3 x 13.4 cm* External: 26.5 x 20.0 x 15.0 cm
BCS-503G	● CoolBox 2XT, green	
BCS-503O	● CoolBox 2XT, orange	
BCS-503PK	● CoolBox 2XT, pink	

*Internal height of open space when core is in the base.

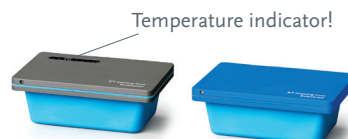
Optional Accessories



XT and 2XT Extension Collar

For use with CoolBox XT and CoolBox 2XT systems to accommodate tall tube modules. The collar is magnetized and easily adheres to the unit base.

Item No.	Description	Dimensions (L x W x H):
BCS-502-C	● XT Extension Collar, purple	Internal: 14.0 x 9.4 x 7.0 cm External: 20.0 x 16.0 x 7.0 cm
BCS-502-CG	● XT Extension Collar, green	
BCS-502-CO	● XT Extension Collar, orange	
BCS-502-CPK	● XT Extension Collar, pink	
BCS-503-C	● 2XT Extension Collar, purple	Internal: 21.0 x 14.3 x 7.0 cm External: 26.5 x 20.0 x 7.0 cm
BCS-503-CG	● 2XT Extension Collar, green	
BCS-503-CO	● 2XT Extension Collar, orange	
BCS-503-CPK	● 2XT Extension Collar, pink	



XT Cores

Keep additional cooling or freezing cores in the freezer for flexibility and extended duration. XT Cooling Core features a 1 to 8°C temperature indicator. Both cooling and freezing cores feature a thermo-conductive surface for uniform temperature distribution.

Item No.	Description
BCS-511	● XT Cooling Core, 0.5° to 4°C
BCS-512	● XT Freezing Core, below 0°C

CoolBox™ 30 System

Keeps tubes cold (0.5° to 4.0°C) for up to 10 hours. Use the optional freezing cartridge to maintain frozen samples below 0°C for up to 6 hours.



CoolBox™ 30 System

Includes: CoolBox 30 base and lid, blue cooling cartridge.



CoolBox 30 Cartridges

Item No.	Description	Dimensions (L x W x H)
BCS-130	● CoolBox 30, purple	Internal: 12 x 10.4 x 7.9 cm* External: 16.5 x 15.25 x 12.7 cm

*Internal height of open space when cartridge is in the base.

Item No.	Description
BCS-132	Cooling Cartridge, blue, 3 per pack
BCS-131	Freezing Cartridge, green, 3 per pack

Popular Pre-assembled Configurations



XT Starter PCR Cooling Systems, pre-assembled

Application	For Use With	Includes	Description	Item No.	Color
PCR/qPCR plate and reagent tube preparation	One 96-well PCR plate, 12 strip-wells or 96 0.2 mL tubes	1 x XT Starter 1 x CoolRack XT PCR96	XT Starter PCR96 System	BCS-556	●
PCR/qPCR strip well and reagent tube preparation	12 x 1.5 mL or 2.0 mL microfuge tubes and 6 rows of PCR stripwells	1 x XT Starter 1 x CoolRack XT M-PCR	XT Starter M-PCR System	BCS-557	●



CoolBox™ XT and CoolBox™ 2XT Systems, pre-assembled

Application	For Use With	Includes	Description	Item No.	Color
Enzyme, PCR reagent or other biological specimen cooling	24 x 1.5 mL or 2.0 mL microfuge tubes	1 x CoolBox XT System 1 x SBS-compatible CoolRack XT M24	CoolBox XT MicroTube 24 System	BCS-576	●
Cell thawing, tissue culture	24 x 1.0 mL or 2.0 mL cryogenic vials with "gripping" wells for one-hand tube opening/closing	1 x CoolBox XT System 1 x SBS-compatible CoolRack XT CFT24	CoolBox XT CryoTube 24 System	BCS-575	●
PCR/qPCR plate preparation	One 96-well PCR plate, 12 strip wells or 96 0.2 mL tubes	1 x CoolBox XT System 1 x SBS-compatible CoolRack XT PCR96	CoolBox XT PCR96 System	BCS-570	●
PCR/qPCR strip well and reagent tube preparation	6 strip wells and 12 microfuge tubes (1.5 to 2.0 mL)	1 x CoolBox XT System 1 x SBS-compatible CoolRack XT M-PCR	CoolBox XT PCR Strip System	BCS-572	●
PCR/qPCR plate and reagent tube preparation	One 96-well PCR plate 12, strip wells 96 0.2 mL tubes and 24 x 1.5 mL or 2.0 mL microfuge tubes	1 x CoolBox 2XT System 1 x SBS-compatible CoolRack XT M24 1 x CoolRack PCR96	CoolBox 2XT PCR Sample Preparation System	BCS-573	●



CoolBox™ 30 Systems, pre-assembled

Application	For Use With	Includes	Description	Item No.	Color
Enzyme, PCR reagent or other biological specimen cooling	30 x 1.5 mL or 2.0 mL microfuge tubes	1 x CoolBox 30 System 1 x CoolRack M30	CoolBox M30 System	BCS-133	●
Cell preparation or thawing, tissue culture	30 x 1.0 mL or 2.0 mL cryogenic vials, with "gripping" wells for one-hand vial opening and closing	1 x CoolBox 30 System 1 x CoolRack CFT30	CoolBox CFT30 System	BCS-166	●