



HASSLE-FREE CELL FREEZING

CoolCell

Consistent $-1^{\circ}\text{C}/\text{min}$ cell freezing without alcohol

- Consistent $-1^{\circ}\text{C}/\text{min}$ cooling rate
- No alcohol
- Fast recycle time between freezes - minutes
- Unlimited number of freezing cycles - no maintenance
- No stuck lids, no frozen fingers
- Transportable without cold hands when frozen
- Unlike alcohol coolers, no warming of nearby freezer samples
- Eliminates the expense and disposal of isopropanol
- Holds up to 12 screw cap 2.0mL cryotube samples

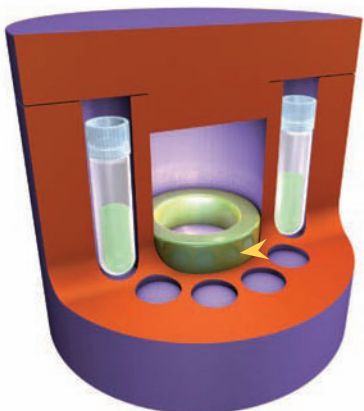


The problem: Convenient cell freezing. Controlled $-1^{\circ}\text{C}/\text{min}$ cell freezing is currently a hassle. Alcohol-filled coolers need continuous maintenance, create hazardous waste, freeze fingers, don't open easily, and slow down work flow. No longer.

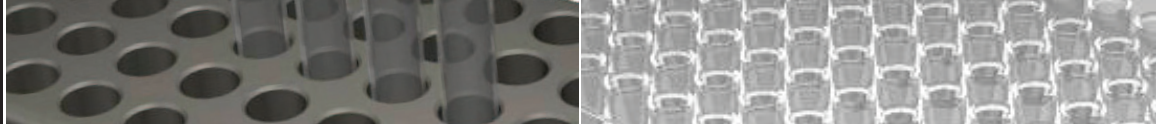
The solution: CoolCell. Achieve a consistent $-1^{\circ}\text{C}/\text{min}$ freeze rate without the use of hazardous solvent with CoolCell.

— The solid state core and insulated design precisely balance heat removal during freezing to ensure repeatable, constant cooling all the way down to cryogenic storage temperature.

Cleaner, greener, easier to use.



CoolCell



Save Cost, Stay Green: Factor the cost of 100% isopropanol, the time to decant and refill, the cost of hazardous material disposal, and the CoolCell makes immediate sense. Just say no to alcohol.



Always a constant -1°C/min: The CoolCell solid core design never needs changing and never varies in cooling rate. The insulated design provides repeatable, constant cooling throughout the freezing period. The result is a reliable -1°C/min rate every time.



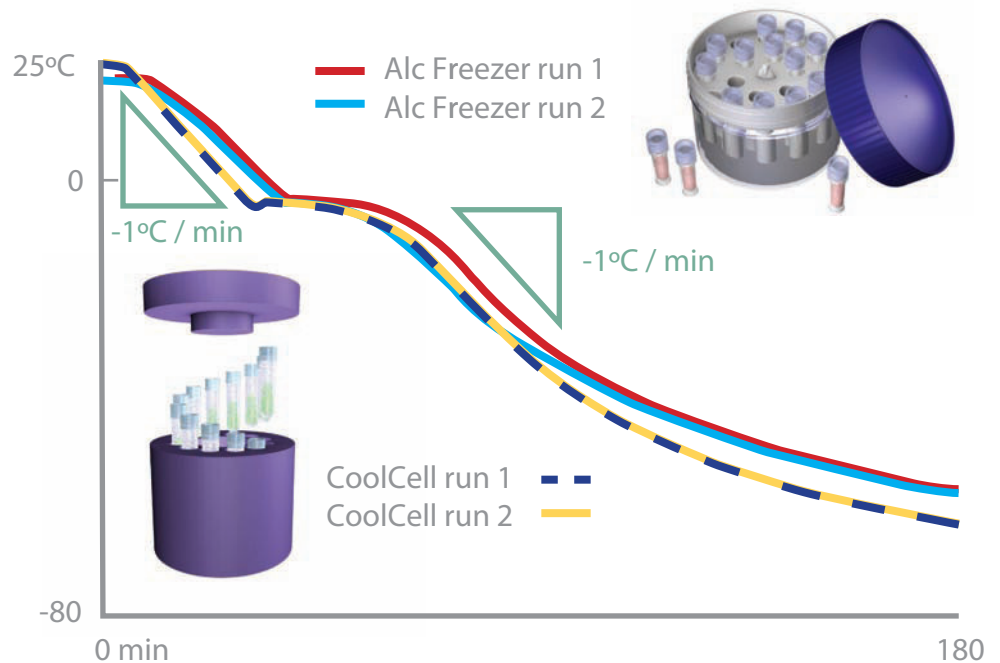
Quick recycle time: Alcohol based freezers take a long, long time to warm up between cycles. Why wait? The CoolCell is ready to use "off the shelf" and is ready to use again just minutes after a freeze cycle. Eliminate waiting with the CoolCell.



Easy to handle: The insulated design protects your hands when you take the CoolCell out of the freezer. No more frosty hands. No more stuck lids.

Validation: The CoolCell and a standard alcohol-filled freezer were compared to the ideal cooling rate of 1°C per minute (green).

Experiment: The temperature of a 1mL volume of DMEM media, 10% DMSO, 20% fetal calf serum in a 2mL cryogenic storage vial was recorded using a thermocouple probe. Both the CoolCell and alcohol-filled freezing modules were filled to capacity with identical cryogenic vials and liquid loads. Freezing modules were placed into a -75°C freezer space. The plateau near 0°C reveals the latent heat released during the conversion of water to ice.



Conclusion: CoolCell provided superior freezing rate control when compared to an alcohol-filled freezing container and provided identical freezing profiles for each vial.

Part# ZBCS-136 CoolCell

-1°C/min controlled rate freezing module for 1mL and 2mL cryotubes
Capacity 12 tubes. Dimensions: 4.6" diameter x 4.3" height, 1lb

CoolRacks Sample Integrity at Any Temperature.