High Throughput Automated Water-free Cell Thawing System

At present, the most common and widely accepted method for rapid thawing of frozen cell samples is to immerse the frozen tube in a 37 ℃ water bath for several minutes, and then judge whether the sample thawing is completed or not by observing the sample status in the cryogenic vials.

However, the use of water bath thawing has obvious disadvantages. These disadvantages include:

(1) The possibility of contamination of biological samples in the cryogenic vial is very high;

(2) The water bath cannot be used as part of the sterile process;

(3) Different operators have great subjective differences in determining thawing time, final temperature and end point;

(4) Restrictions on the use of water bath in GMP or clinical environment;

(5) Non-standard and non-intelligent operation, which cannot be integrated into automatic cell culture equipment.

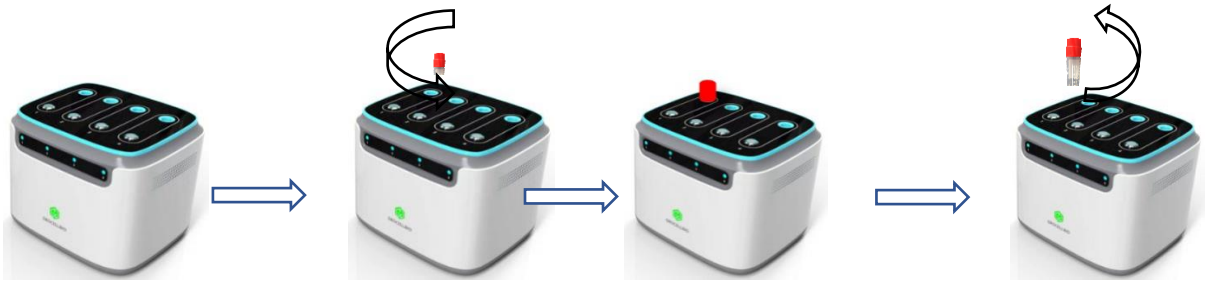
In addition, when multiple cryogenic vials need to be thawed at once, it is even more difficult to ensure the consistency of the thawing process between each vial, which increases the bias caused by the subjective operation of the experimenter.

Our independently developed**EcCT-HT 2.0 and EcCT-HT 5.0 High Throughput Automated Water-free Cell Thawing Systems** have overcome the last obstacle in the process of low-temperature preservation, replaced the method of thawing cells in water bath, and avoided the problems caused by cell thawing in water bath. At the same time, they provide a perfect solution for users who need to thaw multiple cryogenic vials at once, which can greatly improve the thawing efficiency, while ensuring the controllability, consistency, and process traceability of the recovery.

Product Features

- **Safe** - eliminate the high pollution risk caused by water bath and ensure the safety of samples
- **High Throughput-** up to 4 cryogenic vials can be thawed simultaneously at once, and each channel can be independently controlled
- **Standardized** - built-in control procedures to achieve controllability and standardization of the cell thawing process and eliminate subjective judgments
- **Strong scalability -** can be integrated into automated cell culture equipment
- **Wide applicability** - suitable for cryogenic vials stored under conditions such as liquid nitrogen, dry ice, and ultra-low temperature refrigerators

Easy to operate



Self-inspection and preheating

Put in a sample

Cell thawing

Thawing completed & Take out a sample

Application area

Biobank, Stem cell, Antibody drug development, CGT, Vaccine, Life science, Medicine. etc

Parameters and ordering information

Model	EcCT-HT 2.0	EcCT-HT5.0
Thawing temperature	37-50 ℃（Users can freely set it）	
Thawing time	3-4 min（The specific time is related to the set conditions and samples）	
Volume of cryogenic vial	1.5-2.0 ml	4.5-5.0 ml
Channel	4	
Indicating signal	Lamp strip and buzzer	
Temperature acquisition frequency	1 HZ	
Temperature sensor	IR sensor	
Temperature accuracy	±0.5 ℃	
Sample protection mechanism	Emergency stop button; The heating module actively separates from the vial to prevent overheating	
Sample status after thawed	Ice-water mixture	
Extensibility	Integrated into automatic cell culture equipment	
Compatible with cryogenic vial brand	Corning, Theimofisher, Greiner, NUNC, Nalgene. etc	
Power	AC100-240V，300W	

Ordering information	
EcCT-HT 2.0	Suitable for 1.5-2.0 ml cryogenic vials
EcCT-HT 5.0	Suitable for 4.5-5.0 ml cryogenic vials
EcCT-MS	Software

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