HB220429

qPCR Lyoprotectant

Product Information

Product name	Cat#	Size
qPCR Lyoprotectant	13743ES60	100 T
	13743ES80	1000 T
	13743ES92	10000 T
	13743ES98	100000 T

Product Description

The main ingredients of this product are trehalose, PEG, mannitol and so on. This product can be used for lyophilization experiments.

Package Information

Component number	Components	Cat#/Size			
		13743ES60 (100 T)	13743ES80 (1000 T)	13743ES92 (10000 T)	13743ES98 (100000 T)
13743	qPCR Lyoprotectant	600 µL	6 mL	60 mL	600 mL

Product Application

This product can be used together with the company's lyophilization reagents such as Cat#13168, Cat#13117, Cat#13746. Taking Cat#13168 as an example, the recommended reaction system is as follows:

Component Number	Components	Volume (µL)	Final concentration
13168-A	4×Hifair™V Lyo-Buffer	6	1×
13168-C	Hifair™V Lyo-Enzyme Mix	0.1	-
13168-B	$MgCl_2$ (25 mmol/L)	2.5	-
13743	qPCR Lyoprotectant	6 µ L	-
-	Primer Mix (10 µmol/L)	0.4 each	0.2 µmol/L
-	Probe Mix (10 µmol/L)	0.2 each	0.1 µmol/L
-	Template RNA	1-5 µ L	-
-	RNase Free H_2O	to 25 µL	-

Shipping and Storage

The product is shipped at room temperature and can be stored at 4°C for 1 month or at -20°C for 1 year.

Cautions

For your safety and health, please wear lab coats and disposable gloves for operation.

This reagent can be used directly for lyophilization, or further exploration of excipients based on this regent for different primers, the standard lyophilization procedure of this reagent is as follows:

		temperature	Slope time	Time	Vacuum mbar	note
Pre-frozen	1	-45°C	——	4 h	——	Cools down at the fastest rate at room temperature
	2	-45°C	——		——	Hold, verify the hold time according to the packaging material
vacuum	3	-45°C	——		0.01	
Sublimation stage	4	-40°C	1 hour	10 h	0.01	Lyophilizer with no slope control can be heated up in 6 stages
	5	0°C	1 hour	10 h	0.01	
	6				0.01	Lyophilizer with no slope control can be heated up in 6 stages
Resolve drying	7	25°C	1 hour	4 h	0	
Moisture content control	8	Pressure boost test retry time: 30 min				Pressure rise test: 2 min<5 Pa
The storage temperature of the product	9	0°C	1	X	0	

[Notes]:

1. If the excipient formula changes slightly, the lyophilization parameters need to be re-measured and adjusted accordingly.

2. Lyophilization equipment requirements:

The surface temperature of the cold trap coil ≤-60°C

The plate temperature ≤-45°C, and the temperature uniformity ± 1°C

Pressure rise test (leak rate test before lyophilization production) is recommended to be done

3. Environmental requirements:

solution distribution and configuration should be carried out under the protection of 10,000-level laminar flow as much as possible. The environmental space dust falls into the solution to form the crystal nucleus in the lyophilization process, which affects the supercooling degree of sollution crystallization , thus resulting in inconsistent product quality.

4. Vacuum control

Doping method: droing gas is recommended to be high purity nitrogen.

5. Lyophilized reagent MIX technical parameter setting reference (lyophilization equipment sublimation efficiency ≥1 mm/h).