

Hieff Unicon™ Lyo-Ready I TaqMan Multiplex qPCR Mix (UDG plus)

Product description

Hieff Unicon™ Lyo-Ready I TaqMan Multiplex qPCR Mix (UDG plus) is a fluorescent quantitative qPCR lyophilizable reagent that uses the company's new generation of antibody-based hot-start Taq enzyme. It is suitable for dual-labeled probes such as FAM/HEX/TET/JOE/ROX (this product is also suitable for Molecular Beacon probes). The reagent contains lyophilization protectant, hot-start Fast Taq DNA polymerase, dNTP and other components, and can be directly lyophilized and loaded on the machine. This product does not contain ROX correction dye and is compatible with various quantitative PCR models. This product contains UDG enzyme, which can effectively prevent the risk of aerosol contamination.

Specifications

Cat.No.	11893ES60 / 11893ES80
Size	100 T / 1000 T

Components

Name	11893ES60 (100 T)	11893ES80 (1000 T)
Lyo-ReadyTaqMan qPCR Mix	2 mL	20 mL

Storage

This product should be stored at -25~-15°C for 12 months.

Instructions

1. Freeze drying system

Component No.	Component	Volume (μL)	Final concentration
11893	Lyo-ReadyTaqMan qPCR Mix	20	1×
	Primer Mix (10 μM)*	x	0.1-0.5 μM
	Probe Mix (10 μM)**	x	50-250 nM
	Total volume	21-25	-

【Note】 :*The concentration of primer probe can be adjusted appropriately according to the experimental requirements, and the total volume cannot exceed 5 μL.

**Primer probe can be added before freeze drying, depending on the experimental plan; if primer probe is not added during freeze drying in this step, it must be added in "3. Reaction amplification system".

2. Freeze drying procedure

Step	Temperature	Set time	Duration	Vacuum degree
Pre-freeze	-45°C	10 min	60 min	—
Primary drying stage	-45°C	10 min	60 min	0.01 mbar
	-40°C	10 min	600 min	0.01 mbar
	-35°C	10 min	120 min	0.01 mbar
	-30°C	20 min	60 min	0.01 mbar
	-20°C	20 min	60 min	0.01 mbar
	-10°C	20 min	60 min	0.01 mbar
	0°C	20 min	60 min	0.01 mbar
Pressure rise test				
Analytical drying stage	5°C	10 min	20 min	0.01 mbar
	10°C	10 min	20 min	0.01 mbar
	15°C	10 min	20 min	0.01 mbar
	20°C	10 min	20 min	0.01 mbar
	25°C	10 min	240 min	0.01 mbar
Pressure rise test				

3. Reaction amplification system

Components	Volume (μL)	Final concentration
20 μL system lyophilized microspheres	1 piece	1×
Primer Mix (10 μM)*	x	0.1-0.5 μM
Probe Mix (10 μM)	x	50-250 nM
Template**	1-25	1×
ddH ₂ O	up to 25	-

[Note] :*If the primer has been added for freeze-drying in the step "1. Freeze-drying system", the primer addition in this step can be ignored.

**The template is dissolved in ddH₂O, and the eluent of the nucleic acid extraction reagent is ddH₂O.

4. Reference amplification program

Step	Temperature	Time	Number of cycles
Pre-denaturation	95°C	5 min	1
Denaturation	95°C	15 sec	45
Annealing/Extension*	60°C	30 sec	

[Note] :*Annealing/extension temperature can be adjusted appropriately according to experimental requirements.

5. Applicable models

Applied Biosystems: 5700, 7000, 7300, 7700, 7900HT Fast, StepOne™, StepOne Plus™, 7500, 7500 Fast, ViiA™7, QuantStudio™ 3 and 5, QuantStudio™ 6,7,12k Flex;

Bio-Rad: CFX96, CFX384, iCycler iQ, iQ5, MyiQ, MiniOpticon, Opticon, Opticon 2, Chromo4;

Eppendorf: Mastercycler ep realplex, realplex 2 s;

Qiagen: Corbett Rotor-Gene Q, Rotor-Gene 3000, Rotor-Gene 6000;

Roche Applied Science: LightCycler 480, LightCycler 2.0; Lightcycler 96;

Stratagene: MX3000P™, MX3005P™, MX4000P™;

Thermo Scientific: PikoReal Cyclers; **Cepheid:** SmartCycler; **Illumina:** Eco qPCR; **SLAN:** SLAN-96S, SLAN-96P.

Notes

For your safety and health, please wear a lab coat and disposable gloves when operating.