

## Product Manual

Product Name	2×TaqMan Multiplex qPCR Master Mix
Catalog Number	CSB-DKT037
Physical Form	Liquid
Storage Conditions	-20 ±5°C, avoid repeated freeze-thaw cycles; can be stored at 2~8°C in the dark for frequent use.
Shipping Condition	≤0°C; dry ice transportation
Product Composition	Buffer system, dNTPs, HS Taq DNA Polymerase、UDG
Quality Control	All components have been tested and found to be free of nucleases and RNase residue
Shelf Life	12 months

### Product Description

This product is suitable for fluorescence quantitative PCR detection using the Taqman probe method. It contains modified HS Taq DNA polymerase, UDG, Mg<sup>2+</sup>, dNTPs, etc. It has the characteristics of high amplification efficiency and high specificity, and is suitable for simultaneous amplification of up to 4 fluorescence channels in a single reaction system, and the results of single channel reaction and multi-channel reaction are very ideal.

Product Components	Component Name	Specification (50T)	Specification (100T)	Specification (500T)
1	2×TaqMan Multiplex qPCR Master Mix	0.75mL	1.5mL	5*1.5mL

### Operating Instructions

Recommended Reaction System	
Components	Additions
ddH <sub>2</sub> O	Up to 30 μL
2×TaqMan Multiplex qPCR Master Mix	15 μL
Upstream Primer(10μM)	0.6 μL
Downstream Primer(10μM)	0.6 μL
Fluorescence Probe(10μM)	0.3μL
Template DNA	X μL

## [Note]:

- a. Primer-probe concentration: Generally, a primer final concentration of 0.2 $\mu$ M and a probe concentration of 0.1 $\mu$ M in the reaction system can achieve good results. If the reaction performance is poor, adjust the primer concentration within the range of 0.1 $\mu$ M-1.0 $\mu$ M.
- b. Template concentration: Genomic DNA of animals and plants: 0.1-1 $\mu$ g, E. coli genomic DNA: 10-100ng,  $\lambda$ DNA: 0.1-10ng, plasmid DNA: 0.1-10ng. If the template is undiluted cDNA, the volume used should not exceed 1/10 of the total qPCR reaction volume.

## Recommended PCR Reaction Program

Temperature	Time	Cycles
37°C	5 -10min	1
95°C	3 min	1
95°C	10 s	40-45
48-68°C	30 s*	

## [Note]:

- c. Annealing temperature and time: The annealing temperature should be adjusted based on the T<sub>m</sub> value of the primers. Generally, setting it 3-5°C lower than the primer T<sub>m</sub> value is sufficient. \*Collect fluorescence.