Product Manual

Product Name	2*SYBR Green qPCR Mix
Catalog Number	CSB-DKT030
Physical Form	Liquid
Storage Conditions	-20 ±5°C, store away from light, avoid repeated freeze-thaw cycles; for frequent use, store at 2~8℃ away from light
Transportation Conditions	≤0℃； transport on dry ice
Product Components	Buffer system, dNTPs, SYBR Green dye, Taq DNA Polymerase
Quality Control	All components have been tested and are free from nucleases and RNase contamination
Shelf Life	12 months

Product Description

This product is a dedicated reagent for qPCR using the SYBR Green I intercalating fluorescence method. It utilizes a specially modified hot-start DNA polymerase with specific antibodies, combined with a PCR buffer optimized for qPCR, to effectively suppress non-specific amplification. It is suitable for the specific detection system of SYBR Green fluorescence dye.

Product Components

Label	Components	Specifications		
1	2×SYBR Green qPCR Mix	0.75mL(50T)	1.5mL(100T)	5*1.5mL(500T)

Operating instructions

1. Perform all operations on ice until the 2×SYBR Green qPCR Mix is completely dissolved. After thorough mixing, centrifuge the solution and collect it at the bottom of the tube.

2. Recommended reaction system (using a 30μL system as an example):

Components	volume
ddH2O	Up to 30 μL
2×SYBR Green qPCR Mix	15 μL

Forward Primer (10μM)	0.6 μL
Reverse Primer (10μM)	0.6 μL
Template DNA	X ul

[Notes]:

a. Gently mix the reaction system. If necessary, collect all reagents at the bottom of the tube by centrifugation to avoid excessive bubble formation caused by vigorous shaking.

b. Primer concentration: Generally, a final primer concentration of 0.2uM in the reaction system produces good results. Adjust the primer concentration within the range of 0.1uM-1.0uM if the reaction performance is poor.

c. Template concentration: Use 10-100 ng genomic DNA as a reference for template quantity. Since the copy number of the target gene in different species' templates varies, gradient dilution can determine the optimal template usage. If the template is undiluted cDNA stock, the volume used should not exceed 1/10 of the total volume of the qPCR reaction.

3. Recommended PCR reaction program

Temperature	Time	number of cycles
95°C	3min	1
95°C 55-65°C	10-30s 15-60s	40
Melt Curve Stage		