

# 2X Real-Time PCR Master Mix

(Including SYBR Green in the mixture)

Cat.No. ODQ383-01

## Description:

2X Real-Time PCR Master mix provides optimized system for accurate and easy real-time PCR using an intercalating reagent. Mixed *h-Taq* DNA polymerase enables high specific DNA amplification due to its capability of Hot Start and multiplex PCR amplification. ROX reference dye is provided in a separate tubes and can be added if the instrument ROX as a passive reference dye.

## Product contents:

- 2X Real-Time PCR Master Mix (Including SYBR Green in the mixture): 4×1mL
- ROX Reference Dye I (50×)
- ROX Reference Dye II (100×)

### ROX Reference Dye I (50×)

ABI PRISM 7000/7700/7300/7900HT, Step One Plus Real-Time PCR System.

### ROX Reference Dye II (100×)

7500 Real-Time PCR System, 7500 Fast Real-Time PCR System, Stratagene Mx3000P, Mx3005P, Mx4000P.

Final Concentration of ROX Reference Dye I, II is 1×

Light Cycler, Thermal Cycler Dice Real Time System II, Smart Cycler System need no ROX.

## Storage

- Long-term Storage: –20°C in dark for 2 years
- Short-term Storage: 4°C in dark for 1 month

## Features

Features	Real Time PCR Master Mix (2X)
Application	<ul style="list-style-type: none"> <li>• Quantification of target DNA using Real-Time PCR</li> <li>• Quantification of target RNA using RT-PCR</li> </ul>

## Recommended PCR mixture and cycling condition

PCR mixture	20μL
2X Real-Time PCR Master Mix	10μL
Forward primer (10pmol/μL)	1μL
Reverse primer (10pmol/μL)	1μL
Template DNA (<300ng)	-μL
Add D.W to	20μL

2-Step Cycling		
Pre-denaturation	Denaturation	Annealing/Extension
1 Cycle	35 – 45 Cycles	
95°C	95°C	60°C
10 min	10 – 20 seconds	20 – 60 seconds

3-Step Cycling			
Pre-denaturation	Denaturation	Annealing	Extension
1 Cycle	35 – 45 Cycles		
95°C	95°C	56 – 64°C	72°C
10 min	10 – 20 seconds	10 – 30 seconds	10 – 60 seconds

### Note

- If the amplicon size is  $\geq 200\text{bp}$ , or the annealing temperature is lower, follow the 3-step cycling.
- The amount of template, extension time, annealing temperature, and the number of PCR cycles may be modified according to the target size, primer's  $T_m$ , and the type of templates for amplification.