

# HS Prime qPCR Premix (2X, Real-time PCR for TaqMan Probe)

Product Name	Cat. No.	Size
HS Prime qPCR Premix (2X)	Q-4000	1.0 ml X 1
	Q-4001	1.0 ml X 3
	Q-4002	1.0 ml X 5
HS Prime qPCR Premix (2X, ROX dye)	Q-4100	1.0 ml X 1
	Q-4101	1.0 ml X 3
	Q-4102	1.0 ml X 5

## Package information

Q-4000	2X HS Prime qPCR Premix (1.0 ml X 1) - with HS Prime Taq DNA Polymerase, reaction buffer, enzyme stabilizer, dNTPs mixture and PCR enhancer
Q-4100	2X HS Prime qPCR Premix (1.0 ml X 1) - with HS Prime Taq DNA Polymerase, reaction buffer, enzyme stabilizer, dNTPs mixture and PCR enhancer  50X ROX dye (25 μM, 50 μl X 1)

## Description

HS Prime qPCR Premix (Real-time PCR for TaqMan Probe) is a 2X premix reagent for real-time PCR by using TaqMan® probe. This product contains the HS Prime Taq DNA Polymerase, which is an enzyme for hot-start PCR.

Also HS Prime qPCR Premix (Real-time PCR for TaqMan Probe) provides as PCR Premix that may be used with any appropriately designed primer and probe to detect any DNA or cDNA sequence.

## Usage Information

- A target template is a DNA, cDNA and all nucleotide sequence.
- Consistent results are obtained for amplicon size ranges from 50 to 150 bp.

## Protocol

The following 50 μl reaction volume can be used for probe real-time PCR.

1. Program the real-time PCR instrument.

2. Prepare the reaction mixture

Components	Volume
DNase-free water	add up to 50 μl
Upstream Primer (10 pmole, 10 μM)	x μl
Downstream Primer (10 pmole, 10 μM)	x μl
TaqMan probe (10 pmole, 10 μM)	x μl
[50X ROX dye (Option)]*	[x μl]
Template DNA	x μl
HS Prime qPCR Premix (2X)	25 μl

### ♣ 50X ROX dye

ROX dye can be included in the reaction to normalize the fluorescent reporter signal, for instruments that are compatible with that option. ROX is supplied at a 25 μM concentration. Use the following table to determine the amount of ROX to use with a particular instrument (per 50 μl reaction volume).

Instrument	Amount of ROX per 50 μl reaction	Final ROX Concentration
AB 7000, 7300, 7700, 7900HT, 7900HT Fast, StepOne, and StepOnePlus	1.0 μl (1X)	500 nM
AB 7500, QuantStudio Stratagene Mx3000P, Mx3005P, and Mx4000	0.1 μl* (0.1X)	50 nM

★ To accurately pipet 0.1 μl per reaction, we recommend diluting ROX 1:10 immediately before use and use 1 μl of the dilution.

3. PCR cycling

Step	Temp. & Time		Cycles
	Temp.	Time	
Initial denaturation	95°C	10 min	1
Amplification	95°C	10~15 sec	30 ~ 45
	60°C	30~60 sec	

● Research Use Only

● Store at -20°C