

# 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<br>(2X, ROX dye 포함) | 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)<br>- 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)<br>- with HS Prime Taq DNA Polymerase, reaction buffer, enzyme stabilizer, dNTPs mixture and PCR enhancer<br><br>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