

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

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

## Package information

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

## Description

The HS Prime qPCR Premix with UDG contains uracil-DNA glycosylase (UDG), dATP, dCTP, dGTP, dTTP and dUTP. UDG can efficiently remove uracil from single-stranded or double-stranded DNA.

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

Also, HS Prime qPCR Premix with UDG (Real-time PCR for TaqMan Probe) can be protected carryover contamination from DNA template.

## 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.

● **Research Use Only**

● **Store at -20°C**

## 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 with UDG (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	
UDG activation	50°C	3 min	1
Initial denaturation	<b>95°C</b>	<b>10 min</b>	1
Amplification	95°C	10~15 sec	30 ~ 45
	60°C	30~60 sec	