

SuPrimeScript qRT-PCR Kit

(Real-time PCR for TaqMan Probe)

Product Name	Cat. No.	Size
SuPrimeScript qRT-PCR Kit	Q-5000	100 rxn* X 1
	Q-5001	100 rxn* X 3
	Q-5002	100 rxn* X 5
SuPrimeScript qRT-PCR Kit (ROX dye 포함)	Q-5100	100 rxn* X 1
	Q-5101	100 rxn* X 3
	Q-5102	100 rxn* X 5

* For 100 X 20 μ l reaction

Package information

Q-5000	10X Enzyme Solution (200 μ l X 1) - with SuPrimeScript RTase, HS Prime Taq DNA Polymerase and RNase Inhibitor 2X qRT-PCR Buffer (1.2 ml X 1) - with reaction buffer and dNTPs mixture
Q-5100	10X Enzyme Solution (200 μ l X 1) - with SuPrimeScript RTase, HS Prime Taq DNA Polymerase and RNase Inhibitor 2X qRT-PCR Buffer (1.2 ml X 1) - with reaction buffer and dNTPs mixture 50X ROX dye (25 μ M, 50 μ l X 1)

Description

SuPrimeScript qRT-PCR Kit (for Probe Real-time PCR) provides a complete system for fast, high-yield and reliable single-tube one-step qRT-PCR.

Usage Information

- The reaction temperature for cDNA synthesis is **50°C**.
- The reaction time for cDNA synthesis is **20 min**.

Protocol

The following 20 μ l or 50 μ l reaction volume can be used for one-step qRT-PCR.

1. Program the real-time PCR instrument.
2. Prepare the reaction mixture

Components		Volume	
RNase-free water		add up to 20 μ l	add up to 50 μ l
Upstream Primer (10 pmoles/ μ l, 10 μ M)		x μ l	x μ l
Downstream Primer (10 pmoles/ μ l, 10 μ M)		x μ l	x μ l
TaqMan probe (10 pmoles/ μ l, 10 μ M)		x μ l	x μ l
[50X ROX dye (Option)]*		[x μ l]	[x μ l]
RNA	- total RNA (1 ng ~ 500 ng) - mRNA (0.1 ng ~ 50 ng)	x μ l	x μ l
2X qRT-PCR Buffer		10 μ l	25 μ l
10X Enzyme Solution		2 μ l	5 μ l

♣ 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 μ M concentration. Use the following table to determine the amount of ROX to use with a particular instrument (per 50 μ l reaction volume).

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

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

3. PCR cycling

Step	Temp. & Time		Cycles
	Temp.	Time	
cDNA synthesis	50°C	20 min	1
Initial denaturation	95°C	10 sec	1
Amplification	95°C	5 sec	30 ~ 45
	60°C	30~45 sec	

- **Research Use Only**
- **Store at -20°C**