

Add-Probe RT-PCR Kit

Research Use Only

Product Code

74311

Component

1. 10X Enzyme Solution 0.2 ml
2. 2X qRT-PCR Buffer 1.2 ml

Storage Condition

Store at -20°C

Description

Add-Probe RT-PCR Kit provides sensitive and easy-to-use components which contain all the reagents for first strand cDNA synthesis and PCR reaction in one-tube by using TaqMan®, and is designed for high sensitivity and specificity on various real-time instruments. Especially, thermostable MMLV RTase (RNase H-), hot-start Taq DNA Polymerase and RNase Inhibitor are included in 10X Enzyme Solution.

Quality Control.

The performance of Add-Probe RT-PCR Kit is tested in an RT and PCR one-tube reaction using human total RNA with specific primers and TaqMan® probes. The sensitivity of the kit is verified by the detection of GAPDH and Actin transcript in 10 pg total RNA after 30 cycles.

Storage and Stability

Add-Probe RT-PCR Kit is stable for 2 years when stored in a constant temperature freezer at less than -20°C

Made in KOREA

This product was manufactured through ISO 9001 & 13485 system.

Nucleic Acid Amplification Protocol

1. Add the following components to a thin-walled PCR tube:

Nuclease-Free H ₂ O	x µl
2.5x Buffer I	8.0 µl
Forward primer (10 µM)	0.25~2.0 µl
Reverse primer (10 µM)	0.25~2.0 µl
TaqMan Probe (10 µM)	0.25~2.0 µl
(Optional) 50x ROX dye	x µl
RNA template	x µl
20x AddScript Enzyme Solution	1.0 µl
Total reaction volume	20 µl

* Recommendation for template RNA concentration in a 20 µl reaction volume

- 1) total RNA: 100 fg ~ 1 µg
- 2) mRNA: 10 fg ~ 1 µg

2. PCR cycling

cDNA synthesis	50°C, 20 min
Initial denaturation	95°C, 10 min
PCR cycling (30 – 40 cycles)	95°C, 10 sec 60°C, 30 - 60 sec

[Note] 50x ROX dye

ROX dye can be included in the reaction to normalize the fluorescent reporter signal, for instruments which are compatible with that option.

50x ROX is a 25 µM concentration. Use the following table to determine the amount of ROX to use with a particular instrument.

Instrument	Final ROX concentration
AB 7000, 7300, 7700, 7900HT, 7900 Fast, StepOne and StepOnePlus	500 nM
AB 7500, 7500 Fast, Stratagene Mx3000P, Mx3005P and Mx4000	50 nM