



The **BEST** for  
Life Science

## *TransScript*<sup>®</sup> II Probe One-Step qRT-PCR SuperMix

Cat. No. AQ321

Storage: at -20°C for one year

### Description

*TransScript*<sup>®</sup> II Probe One-Step qRT-PCR SuperMix is a one-step qRT-PCR kit with high sensitivity, high synthesis efficiency and high amplification efficiency. It contains all the necessary reagents for cDNA synthesis and qPCR except probe, total RNA/mRNA template and gene specific primers.

### Highlights

- High specificity, high sensitivity, high efficiency.
- Easy and rapid, reducing contamination.
- Compatibility with various real-time cyclers with passive reference dyes provided for different qPCR instruments.

### Applications

- Multiple copy and low copy gene detection
- GC-rich or complex secondary structure RNA template
- Viral RNA and trace RNA detection

### Passive Reference Dye

- Passive Reference Dye I (50×)

ABI Prism 7000/7300/7700/7900, ABI Step One, ABI Step One Plus, ABI 7900HT, ABI 7900HT Fast

- Passive Reference Dye II (50×)

ABI Prism 7500, ABI Prism 7500 Fast, ABI QuantStudio Dx/3/5, ABI QuantStudio 6/7/12K Flex, ABI ViiA 7, Stratagene Mx3000P/Mx3005P/Mx4000

- No Passive Reference Dye

Roche LightCycler 480, Roche Light Cycler 96, MJ Research Chromo4, MJ Research Opticon 2, Takara TP-800, Bio-Rad iCycler iQ, Bio-Rad iCycler iQ5, Bio-Rad CFX96, Bio-Rad C1000 Thermal Cycler, Thermo Scientific Pikoreal 96, Qiagen Corbett Rotor-Gene 6000, Qiagen Corbett Rotor-Gene G, Qiagen Corbett Rotor-Gene Q, Qiagen Corbett Rotor-Gene 3000, Mastercycler ep realplex.

### Kit Contents

| Component                                                          | AQ321-01 | AQ321-02 |
|--------------------------------------------------------------------|----------|----------|
| <i>TransScript</i> <sup>®</sup> II Probe One-Step RT/RI Enzyme Mix | 40 µl    | 160 µl   |
| 2× <i>PerfectStart</i> <sup>™</sup> Probe One-Step qPCR SuperMix   | 1 ml     | 4×1 ml   |
| Passive Reference Dye (50×)                                        | 40 µl    | 160 µl   |
| RNase-free Water                                                   | 1 ml     | 4×1 ml   |

### Reaction Components (20 µl)

| Component                                                          | Volume      | Final Concentration |
|--------------------------------------------------------------------|-------------|---------------------|
| RNA Template                                                       | 1 pg-100 ng | as required         |
| Forward GSP (10 µM)                                                | 0.4 µl      | 0.2 µM              |
| Reverse GSP (10 µM)                                                | 0.4 µl      | 0.2 µM              |
| Probe (1 µM)                                                       | 1 µl        | 0.05 µM             |
| 2× <i>PerfectStart</i> <sup>TM</sup> Probe One-Step qPCR SuperMix  | 10 µl       | 1×                  |
| <i>TransScript</i> <sup>®</sup> II Probe One-Step RT/RI Enzyme Mix | 0.4 µl      | -                   |
| Passive Reference Dye (50×) (optional)                             | 0.4 µl      | 1×                  |
| RNase-free Water                                                   | Variable    | -                   |
| Total volume                                                       | 20 µl       | -                   |

(The working concentration of the Probe will affect the Ct value. Please determine the optimum dosage of the Probe based on the experimental results.)

### Thermal cycling conditions (two-step)

50°C 5 min

94°C 30 sec

94°C 5 sec

60°C 30 sec\* } 40-45 cycles

For ABI qPCR instrument, we suggest using the following exposure time:

- \* For ABI Prism 7700/7900, the time to 30 seconds.
- \* For ABI Prism 7000/7300, the time to 31 seconds.
- \* For ABI Prism 7500, the time to 34 seconds.
- \* For ABI ViiA 7, the time is at least 19 seconds.

FOR RESEARCH USE ONLY