



## TransScript® II Probe One-Step qRT-PCR SuperMix

Cat. No. AQ321

Storage: at -20°C for one year

### Description

TransScript® II Probe One-Step qRT-PCR SuperMix combines the firststrand cDNA synthesis and qPCR in the same tube to simplify reaction setup and reduce the possibility of contamination. Only gene specific primers can be used for this kit. TransScript® II Probe One-Step qRT-PCR SuperMix contains all the necessary reagents for cDNA synthesis and qPCR except probe, total RNA/mRNA template and gene specific primers.

### Highlights

- 5 minutes cDNA synthesis
- cDNA synthesis and qPCR are performed in a single tube using gene specific primers with total RNA or mRNA as templates.
- Passive reference dyes are 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®
- Passive Reference Dye II (50×)  
ABI Prism® 7500, ABI Prism® 7500 Fast, ABI Q6, ABI QuantStudio® 6/7 Flex, ABI ViiA® 7, Stratagene Mx3000® /Mx3005P®, Qiagen Corbett Rotor-Gene® 3000
- 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

### Kit Contents

| Component                                 | AQ321-01 | AQ321-02 |
|---|----------|----------|
| TransScript® II One-Step RT/RI Enzyme Mix | 40 µl    | 160 µl   |
| 2×TransStart® Probe 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   | Variable | as required         |
| Forward GSP (10 µM)  | 0.4 µl   | 0.2 µM              |
| Reverse GSP (10 µM)  | 0.4 µl   | 0.2 µM              |
| Probe (10 µM)  | 0.4 µl   | 0.2 µM              |
| 2× <i>TransStart</i> <sup>®</sup> Probe qPCR SuperMix        | 10 µl    | 1×                  |
| <i>TransScript</i> <sup>®</sup> II 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    | -                   |

(For genomic DNA template, the suggested quantity is 10 pg~1 µg. For plasmid DNA template, the suggested copy number is 10~10<sup>7</sup>)

### 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 signal collecting time:

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

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