

## Kia One-Step qRT-PCR Mix (100 reactions)

Cat. No. AQ211

Storage: at -20°C in dark for one year

### Description

Kia One-Step qRT-PCR Mix is a one-step qRT-PCR kit which provides high sensitivity, high efficiency cDNA synthesis and qPCR amplification. RNA template and reverse gene specific primer (GSP) are used for first-strand cDNA synthesis, and then qPCR is performed with resulting cDNA and forward/reverse GSP. All the reactions including reverse transcription and qPCR are completed in one tube and in one reaction system.

### Advantages

- High efficiency cDNA synthesis with One-Step Enzyme Mix and qPCR Mix, followed by PCR amplification with resulting cDNA. Simple procedure helps to minimize contamination
- High sensitivity, high specificity, accurate data.

### Applications

- Multiple copy and low copy gene detection
- Viral RNA and trace RNA detection


Kit Contents:

Component	Amount
One-Step Enzyme Mix	40 µl
Green qPCR SuperMix	1 ml
Passive Reference Dye (50x)	40 µl
RNAse Free Water	1 ml


### Reaction Components 20 µl

Component	Volume	Final Concentration
RNA Template	1pg->1 µg	as required
Forward GSP (10 µM)	0.4 µl	0.2µM
Reverse GSP (10 µM)	0.4 µl	0.2 µM
qPCR Mix	10 µl	1x
One-Step RT Enzyme Mix	0.4 µl	-
Passive Reference Dye (50x) (optional)	0.4 µl	1x
RNase-free Water	Variable	-
Total volume	20 µl	-

### Thermal cycling program (two steps)

45°C 5 min  
 94°C 30 sec  
 94°C 5 sec  
 60°C 30 sec  40-45 cycles  
 Dissociation step

### Thermal cycling program (three steps)

45°C 5 min  
 94°C 30 sec  
 94°C 5 sec  
 50-60°C 15 sec  
 72°C 10 sec  40-45 cycles  
 Dissociation step

FOR RESEARCH USE ONLY

Two-step method is suitable for high specific qPCR.  
Three-step method is suitable for high efficiency qPCR.

**Notes**

- High quality RNA template is recommended for use to ensure successful cDNA synthesis .
- This kit is only suitable for GSP, but unsuitable for first-strand cDNA synthesis using Oligo(dT) or Random Primer.

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