

Kia qPCR SuperMix

Cat No: AQ401

Storage: at -20°C for one year

Description

Kia qPCR SuperMix is design in 2 types.

Type P is a ready-to-use qPCR cocktail containing a special *Taq* DNA Polymerase, optimized double cation buffer, dNTPs, PCR Enhancer and PCR stabilizer. qPCR SuperMix is provided at 2 x concentration and can be used at 1x concentration by adding template, primer, probe, passive reference dye (optional) and H₂O. This kit takes advantage of using fluorescent probe (TaqMan or Molecular Beacon) in PCR reaction system. During the procedure of PCR amplification, the level of fluorescence signal is proportional to the amount of amplified products, thus the amount of nucleic acid in samples can be assessed by the intensity of fluorescence signal.

Type G is a ready-to-use qPCR cocktail containing a special *Taq* DNA Polymerase, optimized double cation buffer, SYBR Green I fluorescence dye, dNTPs, PCR Enhancer and PCR stabilizer. qPCR SuperMix is provided at 2x concentration and can be used at 1x concentration by adding template, primer, passive reference dye (optional) and H₂O.

Advantages

- *S-Taq* DNA Polymerase, a novel "hot start" enzyme with double blocking technique, provides high sensitivity, high specificity and accurate data.
- Double cation (K⁺, NH₄⁺) buffer enhances the specificity and reduces primer-dimer formation.
- Passive reference dyes are suitable for different qPCR instruments (normalize the fluorescent signal between reactions).

Kit content

	Type P	Type G
Probe qPCR SuperMix	1 ml	-
Green qPCR SuperMix	-	1 ml
Passive Reference Dye	40 µl	40 µl

Reaction component (20 µl)

Component	Volume	Final concentration
RNA template	Variable	As required
Forward primer (10 µl)	0.4 µl	0.2 µM
Reverse primer (10 µl)	0.4 µl	0.2 µM
Probe (in type P)	0.4 µl	1x
2X qPCR SuperMix	10 µl	-
Passive Reference Dye	0.4 µl	1x
ddH ₂ O	Variable	-
Total volume	20 µl	-

(For genomic DNA template, the suggested quality is 10 pg-: 1 ug. For plasmid DNA template, the suggested copy number is 10³-10⁷)


Thermal cycling program (two steps) type P

94°C	30 sec	
94°C	5 sec	
60°C	30 sec	


40-45 cycles

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Thermal cycling program (two steps) type G

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

Thermal cycling program (three steps) type G

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

Fluorescent signals can be collected during the annealing or extension stage.

Note

Completely thaw the contents in the tube and mix well before each use

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