PerfectStart® Green qPCR SuperMix (+Universal Passive Reference Dye)

Please read the datasheet carefully prior to use.

Cat. No. AQ602

Version No. Version 2.0

Storage: at -18℃ or below in the dark for two years

Description

The kit contains a *PerfectStart*® Taq DNA Polymerase, optimized dual-cation buffer, SYBR Green I, dNTPs, PCR enhancer, PCR stabilizer and Universal Passive Reference Dye. Three monoclonal antibodies bind to the hot-start Taq DNA Polymerase, effectively blocking DNA polymerase activity and inhibiting non-specific amplification at low temperature. qPCR SuperMix is provided at 2×concentration and can be used at 1×concentration by adding template, primers, and nuclease-free water.

Features

• Blocking by 3 antibodies; high specificity, sensitivity and amplification efficiency; applicable to a wide range of species.

• Dual-cation buffer enhances specificity, reduces primer-dimer formation, and ensures accurate data.

Kit Contents

Component	AQ602-01	AQ602-02	AQ602-03	AQ602-04
2×*PerfectStart*® Green qPCR SuperMix (+Universal Passive Reference Dye)	1 ml	5×1 ml	15×1 ml	25×1 ml
Nuclease-free Water	1 ml	5 ml	3×5 ml	5×5 ml

Reaction Components (taking 20 µl reaction system as an example)

Component	Volume	Final Concentration
Template	Variable	as required
Forward Primer (10 µM)	0.4 µl	0.2 µM
Reverse Primer (10 µM)	0.4 µl	0.2 µM
2×*PerfectStart*® Green qPCR SuperMix (+Universal Passive Reference Dye)	10 µl	1×
Nuclease-free Water	Variable	-
Total volume	20 µl	-

(For genomic DNA, we suggest using 10 pg-1 µg template, while for plasmid DNA, we suggest using 10-10^7 copies.)

qPCR (three-step method)

94℃	30 sec	
94℃	5 sec	40-45 cycles
50-60℃	15 sec★	
72℃	10 sec★	
Dissociation Stage		

qPCR (two-step method)

94℃	30 sec	
94℃	5 sec	40-45 cycles
60℃	30 sec★	
Dissociation Stage		

For ABI instruments, fluorescent signals can be collected during the annealing or extension stage in the three-step method.

★ For ABI Prism 7700/7900, set the read time to 30 seconds.

★ For ABI Prism 7000/7300, set the read time to 31 seconds.

★For ABI Prism 7500, set the read time to 34 seconds.

★ For ABI ViiA 7, set the read time at least 19 seconds.

Three-step qPCR is more suitable for higher amplification efficiency assay. Two-step qPCR is more suitable for higher specificity assay.

Passive Reference Dye is available for instruments

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

Notes

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

For research use only, not for clinical diagnosis.

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