SYBR Green PCR Master Mix

Cat. No.
S 8701 (40 reactions) **S 8702 (200 reactions)**
Store at 4°C

Description

2x SYBR Green PCR Master Mix is a ready-to-use cocktail containing all the components, except primers, template and water necessary to perform real-time PCR using SYBR Green I Dye. It contains optimal levels of active SYBR Green I dye and AmpSure™ Gold DNA Polymerase (a chemically modified "hot-start" version of *Taq* DNA polymerase) supplied in reaction buffer.

2x SYBR Green PCR Master Mix is supplied at a 2x concentration and contains hot-start *Taq* DNA polymerase, SYBR Green dye, ROX Reference Dye, 5mM $MgCl_2$ and dNTPs.

Application

The SYBR Green PCR Master Mix is a ready-to-use cocktail containing all the components, except primers, template and water necessary to perform real-time PCR using SYBR Green I Dye. Direct detection of polymerase chain reaction (PCR) product is monitored by measuring the increase in fluorescence caused by the binding of SYBR Green dye to double-stranded (ds) DNA.

In RNA quantitation assays, the SYBR Green PCR Master Mix is used in the second step of a two-step reverse-transcription polymerase chain reaction (RT-PCR) protocol.

Kit Size

Component	40 rxn	200 rxn
2x SYBR green Master Mix	1 ml	5x 1 ml

Storage and Stability

Upon receipt, store the SYBR Green PCR Master Mix at 2 to 8 ° C. Minimize exposure to direct light. Exposure to direct light for an extended period of time may result in loss of fluorescent signal intensity. If stored under the recommended conditions, the product will maintain performance through the control date printed on the label.

Protocol

Component	Volume for 50-ul reaction(ul)	Final concentration
2x SYBR green Master Mix	25	1x
Forward primer	variable	50-900nM
Reverse primer	variable	50-900nM
Template	variable	1ng-100ng
water	variable	-
Total	50	-

An example of thermal Cycling Parameters:

	Temp.	Time	No. of cycle
Enzyme activation	95°C	15 min	1
Denaturation	95°C	15 sec	
Annealing	50-60°C	30 sec	
Extension	72°C	30 sec	40

It is recommended to perform a melt curve to confirm the specificity of the reaction. Melt curve program may vary depending on instrument manufacturer and software.

Quality Control

This product is tested functionally in qPCR using plasmid DNA. Kinetic analysis must demonstrate a linear dose response with decreasing target concentration over six orders of magnitude.

For research use only. Not intended for any animal or human therapeutic or diagnostic use