

RbTaq™ qPCR 2X PreMIX (SYBR Green with low ROX)

Cat.#	Size
RT530S	200 reaction (1 ml X 2)
RT530M	500 reaction (1 ml X 5)

Expire date:

Store at -20°C

Supplied with: Sterile water (RNase free)

For Research Use Only. Not for use in diagnostic procedures.

ISO9001 ISO14001 ISO13485

Product description

RbTaq™ qPCR 2X PreMIX (SYBR Green with low ROX) is a preassembled liquid mixture that contains hot-start Taq, optimal reaction buffer, dNTP, stabilizing agents, ROX reference dye and SYBR Green I dye. RbTaq™ qPCR 2X PreMIX (SYBR Green with low ROX) is a rebody (Rb) mediated hot start method of Taq DNA polymerase. In the hot start method, Taq DNA polymerase is combined with a rebody that specifically binds to the enzyme and inactivates until the first denaturation step. Thus, RbTaq™ qPCR 2X PreMIX (SYBR Green with low ROX) is suitable for high-speed PCR and designed to have enhanced specificity, sensitivity and amplification efficiency of various targets.

Characteristics

- High specificity: Enhanced specificity by the use of Hot Start PCR polymerase
- High-speed : Rebody mediated hot start Taq allows rapid and accurate qPCR
- Stability: Enhanced stability allows one year storage at -20°C
- Easy-to-use: PreMIX contains everything needed except for primers, template and probe
- High reproducibility is ensured by rigorous quality control

Applications

- Real-time quantification of gDNA and cDNA targets
- Gene expression profiling
- Microbial & viral pathogen detection

Standard reaction conditions

- PCR mixture

RbTaq™ qPCR 2X PreMIX (SYBR Green with low ROX)	10 µl
Template DNA	1 µl
Primers 1 (5~10 pmol/µl)	1 µl
Primers 2 (5~10 pmol/µl)	1 µl
Sterile water (RNase free)	up to 20 µl

- PCR cycle

Initial denaturation*	95°C	3 min
Denaturation	95°C	≤10 sec
Annealing	60°C	15 sec
Elongation	72°C	15~30 sec
Number of cycles	35~40 times	
* 30 sec at 95°C for cDNA and 3 min at 95°C for genomic DNA is recommended for enzyme activation.		

※ROX final concentration for different instruments

		Real Time PCR Instrument	
Low ROX	ABI	7500, 7500Fast, ViiA 7, QuantStudio™ 6, QuantStudio™ 7, QuantStudio™ 12K Flex	
	Bio-Rad	iCycler, MyiQ, MiQ 2, iQ 5, CFX96, CFX384, Chromo4, MJOpticon, Opticon 2, MiniOpticon	
	Cepheid	SmartCycler	
	Eppendorf	Mastercycler	
	Illumina	Eco Real-Time PCR System	
	QIAGEN	Rotor-Gene Q, Rotor-Gene 3000, Rotor-Gene 6000	
High ROX	Roche	LightCycler 480, LightCycler 2.0	
	Stratagene	MX4000P, MX3000P, MX3005P	
	ABI	5700, 7000, 7300, 7700, 7900, 7900HT, 7900HTFast, StepOne, StepOnePlus	

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