

## TOPreal™ One-step RT qPCR Kit (SYBR Green with high ROX)

<b>Cat.#</b>	<b>Size</b>
RT433S	100 reactions
RT433M	500 reactions

Expire date:

Store at -20°C

Supplied with:

TOPreal™ One-step RT qPCR Enzyme MIX  
 2X TOPreal™ One-step RT qPCR Reaction MIX  
 (with high ROX)  
 Sterile water (RNase free)

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

ISO9001 ISO14001 ISO13485

### Product description

TOPreal™ One-step RT qPCR kit (SYBR Green with high ROX) is a ready-to-use solution optimized for One Step RT qPCR including SYBR Green I and high level of ROX as a reference dye. The easy one-tube setup minimizes the risk of contamination. This kit contains HOT Start PCR polymerase, which prevents extension of nonspecifically annealed primers and primer-dimers, and Reverse Transcriptase, high yield of synthesizing cDNA. The optimized components result in highly sensitive and successful results.

### Characteristics

- Reduce the contamination risk of RT qPCR analysis.
- High specificity and sensitivity.
- Normalization of the SYBR Green I: ROX Passive reference dye is included in the master mix.

### Applications

- Real-time quantification of RNA target
- Gene expression analysis.

### Quality control

- Purity: >99% on SDS-PAGE
- Endonuclease-free
- Exonuclease-free
- RNase-free
- Inhibitor-free

### Standard reaction conditions

#### - RT qPCR mixture

TOPreal™ One-step RT qPCR Enzyme MIX	1 µl
2X TOPreal™ One-step RT qPCR Reaction MIX (with high ROX)	10 µl
Template (total RNA, 10 ng ~ 1 µg/µl)	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
*Assemble the reaction mixture on ice	

#### - RT qPCR cycle

Reverse Transcription	50°C	30 min
PCR reaction		
Initial denaturation	95°C	10 min
Denaturation	95°C	5 sec
Annealing & Elongation	60°C	30 sec
Number of cycles	30~45 times	

### ※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
High ROX	illumina	Eco Real-Time PCR System
	QIAGEN	Rotor-Gene Q, Rotor-Gene 3000, Rotor-Gene 6000
	Roche	LightCycler 480, LightCycler 2.0
	Stratagene	MX4000P, MX3000P, MX3005P
High ROX	ABI	5700, 7000, 7300, 7700, 7900, 7900HT, 7900HTFast, StepOne, StepOnePlus

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