

RealMasterMix RT-PCR Probe Kits

For highly sensitive probe-based, real-time one-step RT-PCR, with or without ROX for use on any real-time thermal cycler

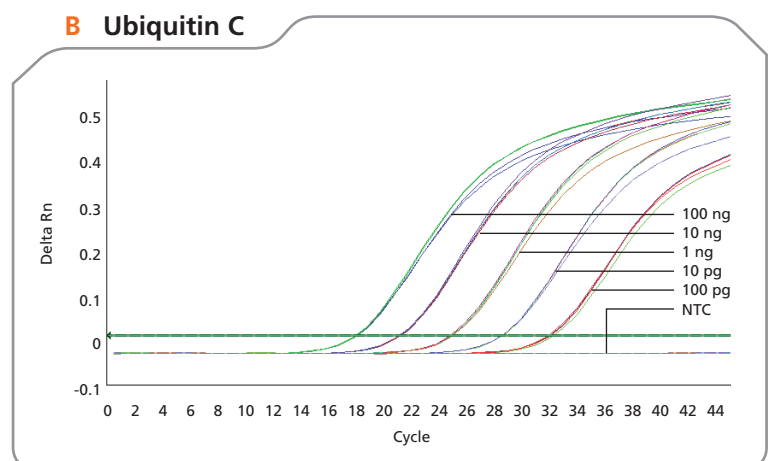
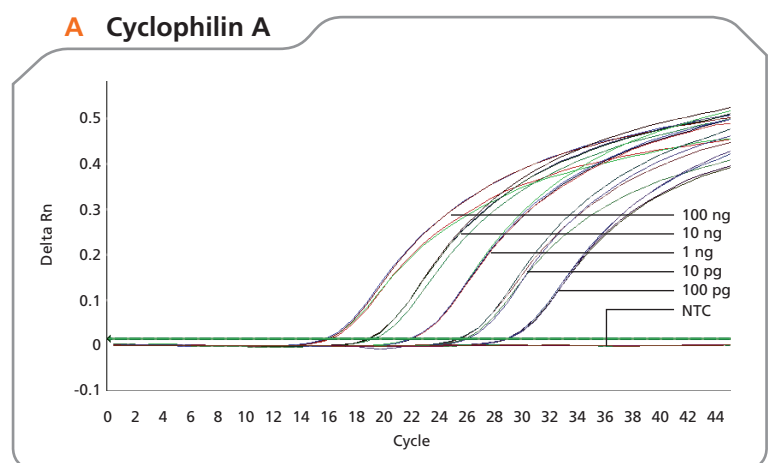
- ⇒ High sensitivity – stringent hot start with innovative Hot-Start/Cold-Stop technology and by RealMaster RT Mix
- ⇒ Excellent reproducibility – robust reaction chemistry with better signal to noise ratio
- ⇒ Higher PCR efficiency and multiplexing – Anti-Primer-Dimer feature
- ⇒ Versatile use – compatibility with any real-time thermal cycler and sequence-specific probes

RealMasterMix RT-PCR Probe Kits provide the components and procedures for highly sensitive and specific probe-based, real-time one-step RT-PCR detection, with and without ROX. The RealMaster RT-PCR Probe Kits are suitable for use on any real-time cycler, with good performance and a dynamic range for an attractive price.

High sensitivity through Hot-Start/ Cold-Stop technology and high affinity reverse transcription enzyme

The RealMasterMix RT-PCR Probe Kit contains the HotMaster *Taq* DNA Polymerase and RealMaster RT Mix. The RealMaster RT Mix consists of extremely thermostable transcription enzymes which dissolve secondary structures and ensure highly efficient and sensitive reverse transcription over a wide range of template concentrations, starting from as little as 10 pg of RNA per reaction. The HotMaster *Taq* DNA Polymerase prevents non-specific product amplification throughout the reaction and facilitates room-temperature reaction set-up. The combination of both enzymes and the RealMasterMix RT-PCR Buffer lead to a robust reaction chemistry resulting in excellent signal to noise ratio and reproducibility.

RealMasterMix RT-PCR Probe Kits provide reagents in an easy-to-use master-mix format. The 5 PRIME RealMasterMix is formulated to automatically adjust the Mg^{2+} concentration ▶



The RealMasterMix RT-PCR Probe Kit provided accurate quantification of Cyclophilin A and Ubiquitin C transcript over a wide dynamic range. Reactions were run in duplicate of a 10fold dilution series of Helix RNA (100 ng to 10 pg) and were analyzed on the Applied Biosystems 7500 Real-Time PCR System. **NTC** no template control.

in the reaction, eliminating the need for optimization of this critical component. The RealMasterMix Probe buffer system with self-adjusting magnesium is pre-optimized for multiplexing of two targets. Optimal free magnesium ion concentration provides higher efficiencies and correlation coefficients for standard curves. It significantly decreases the number of cycles required to reach the threshold (C_t value) allowing amplification over more orders of magnitude.

Application

Probe based quantitative one-step RT-PCR, e.g. gene expression analysis or virus detection.

Kit content

Components / Reactions	RealMasterMix RT-PCR Probe Kit		RealMasterMix RT-PCR Probe ROX Kit	
	200 Rxns*	2000 Rxns*	200 Rxns*	2000 Rxns*
2.5x RealMasterMix RT- PCR Probe	4 x 1.0 ml	40 x 1.0 ml	–	–
2.5x RealMasterMix RT-PCR Probe ROX	–	–	4 x 1.0 ml	40 x 1.0 ml
RealMaster RT Mix	100 µl	10 x 100 µl	100 µl	10 x 100 µl
Stop RNase Inhibitor Solution	100 µl	10 x 100 µl	100 µl	10 x 100 µl
25 mM Magnesium Solution	1.5 ml	10 x 1.5 ml	1.5 ml	10 x 1.5 ml
RNase-free Water	3 x 1.8 ml	30 x 1.8 ml	3 x 1.8 ml	30 x 1.8 ml
Ref. No.	2200900	2200910	2200920	2200930

*1 reaction = 50 µl

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This product is an Authorized 5' Nuclease Core Kit without Licensed Probe. Its purchase price includes a limited, non-transferable immunity from suit under certain patents owned by Roche Molecular Systems, Inc. or F. Hoffmann-La Roche Ltd, for using only this amount of the product in the practice of the 5' nuclease process solely for the purchaser's own internal research when used in conjunction with Licensed Probe. No right under any other patent claims (such as apparatus or system claims) and no right to use this product for any other purpose is hereby granted expressly, by implication or by estoppel. Further information on purchasing licenses may be obtained by contacting the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

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