

Technical Product Specification

QuantiNova® SYBR® Green RT-PCR Kit 208152 (100), 208154 (500), or 208156 (2500) reactions



Product description

For 100 x 20 µL reactions: 1 mL QuantiNova SYBR Green RT-PCR Master Mix, 20 µL QuantiNova SYBR Green RT Mix, 20 µL Internal Control RNA, 500 µL Yellow Template Dilution Buffer, 250 µL ROX Reference Dye, 1.9 µL RNase-Free Water

For 500 x 20 µL reactions: 3 x 1.7 mL QuantiNova SYBR Green RT-PCR Master Mix, 100 µL QuantiNova SYBR Green RT Mix, 100 µL Internal Control RNA, 500 µL Yellow Template Dilution Buffer, 1 mL ROX Reference Dye, 2 x 1.9 µL RNase-Free Water

For 2500 x 20 µL reactions: 15 x 1.7 mL QuantiNova SYBR Green RT-PCR Master Mix, 5 x 100 µL QuantiNova SYBR Green RT Mix, 2 x 100 µL Internal Control RNA, 5 x 500 µL Yellow Template Dilution buffer, 5 x 1 mL ROX Reference Dye, 10 x 1.9 µL RNase-Free Water

Applications

For highly sensitive and specific one-step RT-qPCR using SYBR Green I:

- From fresh or frozen adherent, semi-adherent or suspension cells using the supplementary protocol directly from cells
- Also from total RNA or mRNA purified from various starting materials used in gene expression analysis
- Accurate RNA quantification over several logs of template
- two-phase hot-start mechanism keeping both reverse transcriptase and Taq polymerase inactive at room temperature

Required sample amount

The QuantiNova One-Step SYBR Green RT-PCR Kits have been optimized for the following:

- As few as single cells up to 2000 cells using the supplementary protocol directly from cells
- 100 fg to 200 ng of purified template RNA input

To be used with the QuantiNova RT-PCR Kit

- All commonly used real-time cyclers or assays are applicable for use with the QuantiNova kits
- We recommend use of QuantiNova LNA PCR Assays for gene expression analysis, conveniently available from GeneGlobe (www.qiagen.com/QuantiNova-LNA)

Process duration

Cells need to be washed and desired cell concentration adjusted before use in One-step RT-qPCR.

- Transcript verification from washed cells possible within 1 hour
- No RNA preparation required
- Cell lysis within 5 minutes at 74°C in PCR vessel
- Integrated reverse transcription step takes 10 minutes at 50°C
- PCR amplification within 30 minutes depending on ramping speed and data acquisition of real time cycler

Ordering webpage: www.qiagen.com/Cell-Line-Solutions

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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