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**