

Clara™ Probe 1-Step Mix



- Super sensitive
- All-in-one mix for DNA & RNA
- Single & multiplex detection

Clara™ Probe 1-Step Mix offers reliable probe-based qPCR detection of both RNA and DNA target sequences. Provided in a one-tube format, this powerful RT-qPCR mix gives superior target amplification, in single or multiplex assays, even on highly dilute samples.

Features

- Concentrated 4x mix, ideal for high-throughput, highly multiplexed assays
- Ultra-sensitive detection of RNA & DNA targets
- Early detection of a wide range of template amounts
- Contains modified UltraScript™ RTase in a single-tube format
- Advanced RNase inhibitor
- Antibody-mediated hot start technology
- Compatible with all real-time PCR platforms – standard and fast cycling conditions

Applications

- Gene expression analysis
- Genotyping
- Allelic discrimination
- In vitro diagnostic kit development
- Single & multiplex RNA & DNA detection

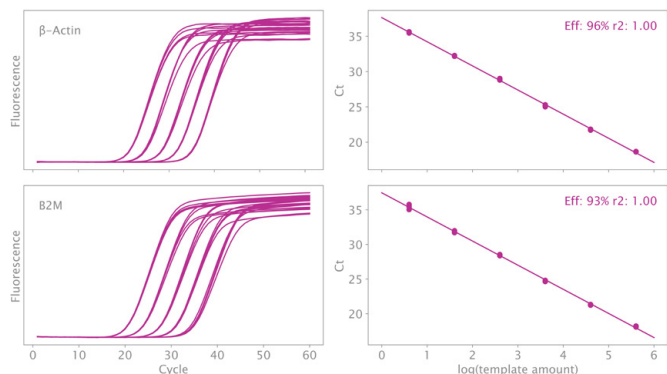


Figure 1. Sensitive detection of mouse RNA in singleplex reactions.

Amplification of common housekeeping genes (β -Actin and β -2-Microglobulin [B2M]) in singleplex setup using Clara™ Probe 1-Step Mix. Amplification curves are shown in the left panels and efficiency in the right panels. 5 serial dilutions of mouse total RNA template were used, corresponding to 50 ng/ μ L, 5 ng/ μ L, 500 pg/ μ L, 50 pg/ μ L, and 5 pg/ μ L. The total reaction volume was 20 μ L. Cycle conditions were 52 °C 15 min, 95 °C 3 min and 60 cycles of 95 °C 15 s, 60 °C 30 s.

Clara™ Probe 1-Step Mix offers high sensitivity and reproducible amplification, with optimal efficiency, even at low template concentrations.

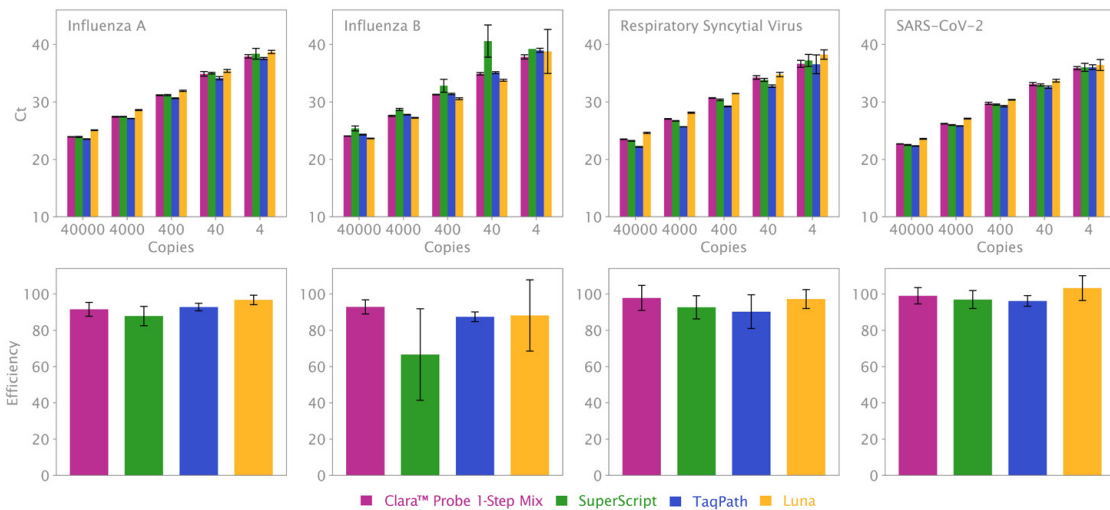


Figure 2. Reliable detection of RNA viruses in a multiplex setup.

Multiplex amplification of common winter viruses (Influenza A, Influenza B, Respiratory Syncytial Virus, and SARS-CoV-2) using Clara™ Probe 1-Step Mix (purple bars), Thermo Fisher SuperScript™ III Platinum™ OneStep qRT-PCR Kit (green bars), Thermo Fisher TaqPath™ 1-Step Multiplex Mastermix (blue bars) and NEB Luna® Universal Probe One-Step RT-qPCT Kit (yellow bars). Ct values are shown in the top panels and efficiency in the bottom panels. 5 serial dilutions of RNA template were used, corresponding to 40 000, 4000, 400, 40, and 4 copies of each viral genome. The total reaction volume was 20 µL. Cycle conditions were 52 °C 15 min, 95 °C 3 min and 50 cycles of 95 °C 15 s, 60 °C 30 s. Clara™ Probe 1-Step Mix shows high sensitivity and reproducible amplification even at low copy number templates with optimal efficiency in a multiplex setup, in line or better than the major competitors.

All-in-one qPCR mix

Clara™ Probe 1-Step Mix is an all-in-one, 4x mastermix for probe-based 1-step RT-qPCR. Engineered to combine maximum sensitivity with ease-of-use, it contains a uniquely modified version of UltraScript™ RTase so the mix can be stored in a single tube. This reduces the amount of pipetting needed for assay setup, minimising the risk of contamination and saving time.

Sensitive, reliable, versatile

Extensive optimisation makes this mix suitable

for all nucleic acid target types. We have tested it against common RNA viruses, including SARS-CoV-2, RSV, Influenza A, and B, standard housekeeping genes, such as g-actin and GAPDH, as well as DNA targets.

Universal probe compatibility

Clara™ Probe 1-Step Mix can be used with all probe chemistries, including TaqMan®, Scorpions® and molecular beacons. Get clear, strong fluorescence no matter what the template.

Catalogue Number	Product Name	Pack Size	Presentation
PB25.81-01	Clara™ Probe 1-Step Mix Lo-ROX	200 reactions	1 x 1 mL
PB25.81-03		600 reactions	3 x 1 mL
PB25.81-05		1000 reactions	5 x 1 mL
PB25.81-50		10 000 reactions	1 x 50 mL
PB25.82-01	Clara™ Probe 1-Step Mix Hi-ROX	200 reactions	1 x 1 mL
PB25.82-03		600 reactions	3 x 1 mL
PB25.82-05		1000 reactions	5 x 1 mL
PB25.82-50		10 000 reactions	1 x 50 mL
PB25.83-01	Clara™ Probe 1-Step Mix No-ROX	200 reactions	1 x 1 mL
PB25.83-03		600 reactions	3 x 1 mL
PB25.83-05		1000 reactions	5 x 1 mL
PB25.83-50		10 000 reactions	1 x 50 mL
PB25.84-01	Clara™ Probe 1-Step Mix Separate-ROX	200 reactions	1 x 1 mL
PB25.84-03		600 reactions	3 x 1 mL
PB25.84-05		1000 reactions	5 x 1 mL