

# Clara™ Probe Mix



- Universal probe-based qPCR
- Ultra-sensitive DNA detection
- Single & multiplex assays

Clara™ Probe Mix offers reliable probe-based qPCR detection of DNA target sequences. This 4x mix gives superior target amplification, in single or multiplex assays, even from highly dilute samples. Streamline your workflows no matter what the application.

## Features

- Concentrated 4x mix, ideal for high-throughput, highly multiplexed assays
- Superior detection of DNA targets
- Reliable quantification of low template amounts
- Reduced primer dimer formation for high specificity
- Antibody-mediated hot start technology
- Compatible with all real-time PCR platforms – standard and fast cycling conditions

## Applications

- Species abundance quantification
- Genotyping
- Allelic discrimination
- In vitro diagnostic kit development
- Single & multiplex DNA detection

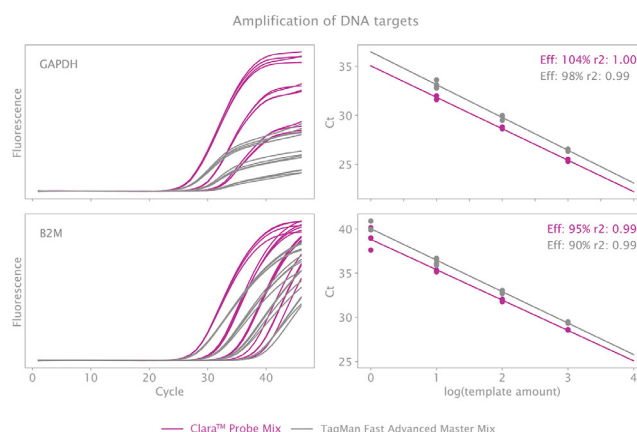


Figure 1. Sensitive amplification of cDNA targets

Amplification of common housekeeping genes (GAPDH, and  $\beta$ -2-Microglobulin [B2M]) using Clara™ Probe Mix (pink curves) or TaqMan® Fast Advanced Master Mix (grey curves). Amplification curves are shown in the left panels and efficiency in the right panels. Three (for GAPDH) or four (for B2M) serial dilutions of mouse cDNA template were used, corresponding to 1 ng/ $\mu$ L, 100 pg/ $\mu$ L, and 10 pg/ $\mu$ L, or 1 ng/ $\mu$ L, 100 pg/ $\mu$ L, 10 pg/ $\mu$ L, and 1 pg/ $\mu$ L, respectively. The reaction volume was 20  $\mu$ L. The cycling conditions were: 95 °C 2 min, followed by 50 cycles of 95 °C 10 s, 60 °C 30 s.

Clara™ Probe Mix overperforms TaqMan® Fast Advanced Master Mix, showing high sensitivity and reproducible amplification even at low template concentrations with optimal efficiency.

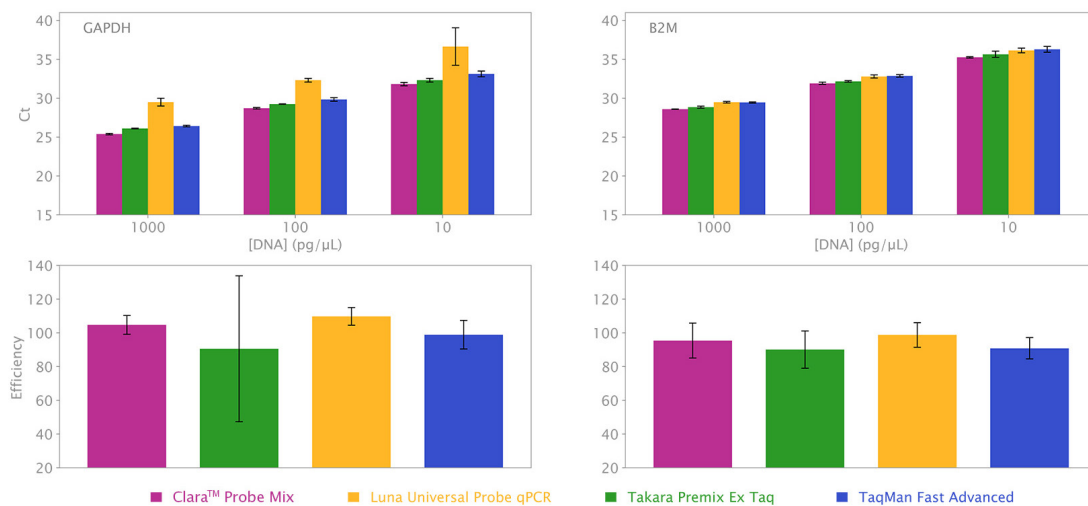


Figure 2. Clara™ Probe Mix outperforms main competitors in cDNA amplification

Amplification of common house-keeping genes (GAPDH, and  $\beta$ -2-Microglobulin [B2M]) using Clara™ Probe Mix (purple), Luna® Universal Probe qPCR Master Mix (yellow), Takara Premix Ex Taq™ (green), and TaqMan® Fast Advanced Master Mix (blue). Ct values are shown in the top panels and efficiency in the bottom panels. Three serial dilutions of mouse cDNA template were used, corresponding to 1 ng/μL, 100 pg/μL, and 10 pg/μL. The cycling conditions were: 95 °C 2 min, followed by 50 cycles of 95 °C 10s, 60 °C 30 s.

Clara™ Probe Mix shows lower Ct values and better efficiencies than the main competitors.

## Powerful qPCR mix

Clara™ Probe Mix is engineered to enable qPCRs with the highest sensitivity and reliability, and with the greatest ease of use in basic research and diagnostic applications alike. It is a universal 4x qPCR mix suitable for use with all types of probe technologies, including TaqMan®, Scorpions® and molecular beacons. Powered by our unique hot start Taq DNA polymerase, Clara™ Probe Mix is suitable for DNA detection in 2-step RT-qPCR protocols when used with a separate cDNA synthesis kit.

## Sensitive, reliable, versatile

Clara™ Probe Mix can be used for all types of probe-based qPCR applications, including gene expression analysis, SNP/allele detection, genotyping and allelic discrimination studies, and species abundance quantification.

Achieve high efficiency in both single and multiplex assays and get clear, reliable conclusions every time.

Catalogue Number	Product Name	Pack Size	Presentation
PB20.61-01	Clara™ Probe Mix Lo-ROX	200 reactions	1 x 1 mL
PB20.61-03		600 reactions	3 x 1 mL
PB20.61-05		1000 reactions	5 x 1 mL
PB20.61-50		10000 reactions	1 x 50 mL
PB20.62-01	Clara™ Probe Mix Hi-ROX	200 reactions	1 x 1 mL
PB20.62-03		600 reactions	3 x 1 mL
PB20.62-05		1000 reactions	5 x 1 mL
PB20.62-50		10000 reactions	1 x 50 mL
PB20.63-01	Clara™ Probe Mix No-ROX	200 reactions	1 x 1 mL
PB20.63-03		600 reactions	3 x 1 mL
PB20.63-05		1000 reactions	5 x 1 mL
PB20.63-50		10000 reactions	1 x 50 mL
PB20.64-01	Clara™ Probe Mix Separate-ROX	200 reactions	[1 x 1 mL mix] & [1 x 200 μL ROX]
PB20.64-03		600 reactions	[3 x 1 mL mix] & [1 x 200 μL ROX]
PB20.64-05		1000 reactions	[5 x 1 mL mix] & [1 x 200 μL ROX]