

# qPCR BIO Probe 1-Step Go

- Thermostable reverse transcription
- Sensitive
- Early Ct

qPCR BIO Probe 1-Step Go is a universal probe kit designed for fast, highly specific and ultra-sensitive probe-based real-time RT-PCR. We use the latest developments in reverse transcriptase technology and buffer chemistry to give efficient cDNA synthesis and real-time PCR in a single tube.

## Features

- Rapid and sensitive detection of RNA viruses including SARS-CoV-2
- High efficiency in multiplex reactions
- Thermostable reverse transcriptase 45°C to 55°C
- Advanced RNase inhibitor
- Rapid extension rate for early Ct values
- Market-leading sensitivity - increased limit of detection
- Antibody-mediated hot start PCR
- Compatible on all real-time PCR platforms - standard and fast cycling conditions

## Applications

- COVID-19 detection tests
- Diagnostic real-time PCR
- Absolute quantification
- Relative gene expression analysis
- TaqMan®, Scorpions® and molecular beacon probes
- Detection of extremely low copy number targets
- Multiplex or singleplex

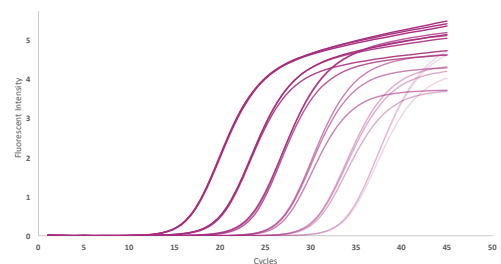


Figure 1. High efficiency and broad dynamic range

Shows TaqMan® probe amplification traces of mouse gene ACTB using mouse liver total RNA as template in triplicate. Template concentrations are 10x serial dilutions ranging from 10pg to 1µg total RNA per 20µl reaction. Cycling conditions were 45°C 10min, 95°C 3min, then 45 cycles of 95°C 10s, 60°C 30s. qPCR BIO Probe 1-Step Go shows high efficiency over a broad dynamic range.



PCR BIOSYSTEMS  
simplifying research



## Fast and Sensitive

qPCRBIO Probe 1-Step Go is engineered for use on a wide range of probe technologies including TaqMan®, Scorpions® and molecular beacons probes. The kit can be used to quantify any RNA template including mRNA, total RNA and viral RNA sequences. qPCRBIO Probe 1-Step Go is designed to give rapid and accurate results over a broad range of template concentrations and is ideally suited to the detection of extremely low copy number targets.

## Thermostable

The kit includes a thermostable and extremely active modified MMLV reverse transcriptase (RTase Go) and advanced RNase inhibitor that prevents degradation of RNA by contaminating RNase. Antibody-mediated hot start technology prevents the formation of primer dimers and non-specific products giving highly specific and ultra-sensitive real-time RT-PCR with unrivalled efficiency in multiplex. Combining the latest developments in polymerase technology and advanced buffer chemistry we offer market-leading performance with minimal or no optimisation required.

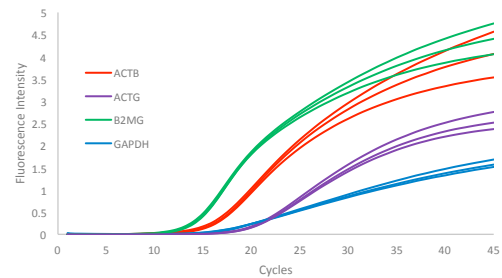


Figure 2. qPCRBIO Probe 1-Step Go in multiplex

Four mouse housekeeping genes were amplified simultaneously in a single multiplex reaction. 1 µg of mouse liver total RNA was used as template. Amplification was detected using TaqMan probes in the following gene/probe combinations: B2MG/HEX, ACTB/Cy5, GAPDH/FAM, and ACTG/TexasRed. Cycling conditions were 45°C 10min, 95°C 3min, then 45 cycles of 95°C 10s, 60°C 30s. This demonstrates that the qPCRBIO Probe 1-Step Go mix can be used to quantify and compare expression levels of multiple genes in a single reaction.

Catalogue Number	Product Name	Pack Size	Presentation
PB25.41-01	qPCRBIO Probe 1-Step Go Lo-ROX	100 x 20µL rxns	[1 x 1mL mix] & [1 x 100µL RTase Go]
PB25.41-03		300 x 20µL rxns	[3 x 1mL mix] & [3 x 100µL RTase Go]
PB25.41-05		500 x 20µL rxns	[1 x 5mL mix] & [1 x 500µL RTase Go]
PB25.41-12		1200 x 20µL rxns	[12 x 1mL mix] & [12 x 100µL RTase Go]
PB25.41-50		5000 x 20µL rxns	[1 x 50mL mix] & [1 x 5mL RTase Go]
PB25.41-500		50000 x 20µL rxns	[1 x 500mL mix] & [1 x 50mL RTase Go]
PB25.42-01	qPCRBIO Probe 1-Step Go Hi-ROX	100 x 20µL rxns	[1 x 1mL mix] & [1 x 100µL RTase Go]
PB25.42-03		300 x 20µL rxns	[3 x 1mL mix] & [3 x 100µL RTase Go]
PB25.42-05		500 x 20µL rxns	[1 x 5mL mix] & [1 x 500µL RTase Go]
PB25.42-12		1200 x 20µL rxns	[12 x 1mL mix] & [12 x 100µL RTase Go]
PB25.42-50		5000 x 20µL rxns	[1 x 50mL mix] & [1 x 5mL RTase Go]
PB25.42-500		50000 x 20µL rxns	[1 x 500mL mix] & [1 x 50mL RTase Go]
PB25.43-01	qPCRBIO Probe 1-Step Go No-ROX	100 x 20µL rxns	[1 x 1mL mix] & [1 x 100µL RTase Go]
PB25.43-03		300 x 20µL rxns	[3 x 1mL mix] & [3 x 100µL RTase Go]
PB25.43-05		500 x 20µL rxns	[1 x 5mL mix] & [1 x 500µL RTase Go]
PB25.43-12		1200 x 20µL rxns	[12 x 1mL mix] & [12 x 100µL RTase Go]
PB25.43-50		5000 x 20µL rxns	[1 x 50mL mix] & [1 x 5mL RTase Go]
PB25.43-500		50000 x 20µL rxns	[1 x 500mL mix] & [1 x 50mL RTase Go]
PB25.44-01	qPCRBIO Probe 1-Step Go Separate-ROX	100 x 20µL rxns	[1 x 1mL mix] & [1 x 100µL RTase Go]
PB25.44-03		300 x 20µL rxns	[3 x 1mL mix] & [3 x 100µL RTase Go]
PB25.44-12		1200 x 20µL rxns	[12 x 1mL mix] & [12 x 100µL RTase Go]