# **qPCRBIO** Probe 1-Step Go

Thermostable reverse transcription

- Sensitive
- Early Ct

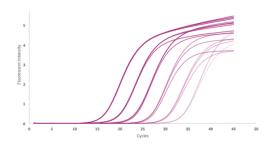
qPCRBIO Probe 1-Step Go is a universal probe kit designed for fast, highly specific and ultra-sensitive probe-based real-time RT-PCR. We use the latest developments in reverse transcriptase technology and buffer chemistry to give efficient cDNA synthesis and real-time PCR in a single tube.

## 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<sup>®</sup>, Scorpions<sup>®</sup> and molecular beacon probes
- Detection of extremely low copy number targets
- Multiplex or singleplex



#### Figure 1. High efficiency and broad dynamic range

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



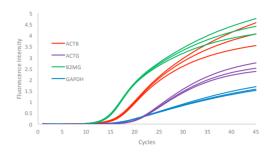
## Fast and Sensitive

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 marketleading 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.  $l\mu g$  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 3 min, then 45 cycles of 95 °C 10 s, 60 °C 30 s. This demonstrates that the qPCRBIO Probe I-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 20 µL rxns	[1 x 1 mL mix] & [1 x 100µL RTase Go]
PB25.41-03		300 x 20 µL rxns	[3 x 1 mL mix] & [3 x 100 µL RTase Go]
PB25.41-05		500 x 20 µL rxns	[1 x 5 mL mix] & [1 x 500 µL RTase Go]
PB25.41-12		1200 x 20 µL rxns	[12 x 1 mL mix] & [12 x 100 µL RTase Go]
PB25.41-50		5000 x 20 µL rxns	[1 x 50 mL mix] & [1 x 5 mL RTase Go]
PB25.41-500		50000 x 20 µL rxns	[1 x 500 mL mix] & [1 x 50 mL RTase Go]
PB25.42-01	qPCRBIO Probe 1-Step Go Hi-ROX	100 x 20 µL rxns	[1 x 1 mL mix] & [1 x 100 µL RTase Go]
PB25.42-03		300 x 20 µL rxns	[3 x 1 mL mix] & [3 x 100 µL RTase Go]
PB25.42-05		500 x 20 µL rxns	[1 x 5 mL mix] & [1 x 500 µL RTase Go]
PB25.42-12		1200 x 20 µL rxns	[12 x 1 mL mix] & [12 x 100 µL RTase Go]
PB25.42-50		5000 x 20 µL rxns	[1 x 50 mL mix] & [1 x 5 mL RTase Go]
PB25.42-500		50000 x 20 µL rxns	[1 x 500 mL mix] & [1 x 50 mL RTase Go]
PB25.43-01	qPCRBIO Probe 1-Step Go No-ROX	100 x 20µL rxns	[1 x 1 mL mix] & [1 x 100 µL RTase Go]
PB25.43-03		300 x 20 µL rxns	[3 x 1 mL mix] & [3 x 100 µL RTase Go]
PB25.43-05		500 x 20 µL rxns	[1 x 5 mL mix] & [1 x 500 µL RTase Go]
PB25.43-12		1200 x 20 µL rxns	[12 x 1 mL mix] & [12 x 100 µL RTase Go]
PB25.43-50		5000 x 20 µL rxns	[1 x 50 mL mix] & [1 x 5 mL RTase Go]
PB25.43-500		50000 x 20 µL rxns	[1 x 500 mL mix] & [1 x 50 mL RTase Go]
PB25.44-01	qPCRBIO Probe 1-Step Go Separate-ROX	100 x 20 µL rxns	[1 x 1 mL mix] & [1 x 200 µL ROX] & [1 x 100 µL RTase Go]
PB25.44-03		300 x 20 µL rxns	[3 x 1 mL mix] & [1 x 200 µL ROX] & [1 x 300 µL RTase Go]
PB25.44-05	•••••••	500 x 20 µL rxns	[1 x 5 mL mix] & [1 x 200 µL ROX] & [1 x 500 µL RTase Go]
PB25.44-12		1200 x 20 µL rxns	[12 x 1 mL mix] & [4 x 200 µL ROX] & [12 x 100 µL RTase Go]

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