TAQuest™ qPCR Master Mix for TaqMan Probes *Low ROX*

Catalog number: 17284, 17285
Unit size: 1 mL, 5 mL

Component	Storage	Amount (Cat No. 17284)	Amount (Cat No. 17285)
TAQuest™ qPCR Master Mix for TaqMan Probes *Low ROX*	Freeze (< -15 °C), Minimize light exposure	1 mL	5 mL

OVERVIEW

TAQuest™ qPCR Master Mix for TaqMan Probes is a ready-to-use 2X solution optimized for qPCR and 2-step RT-qPCR compatible with TaqMan gene expression assays. The master mix provides all of the essential components including our proprietary TAQuest™ Hot Start Taq DNA Polymerase enzyme and dNTPs in an optimized PCR buffer, except the template, primers and probes. The Hot Start Taq DNA polymerase allows you to set up a PCR reaction at room temperature, thus minimizing non-specific product formation. The optimized composition ensures PCR specificity and sensitivity with all sample types such as genomic, plasmid, viral and cDNA templates. TAQuest™ qPCR Master Mix for TaqMan Probes has been designed to be used for duplex reactions using internal positive controls. This master mix contains a low amount of ROX reference dye.

KEY PARAMETERS

qPCR

Instrument specification(s) Filter based on probes

SAMPLE EXPERIMENTAL PROTOCOL

The following protocol can be used as a guideline.

Note Thaw the TAQuest™ qPCR Master Mix for TaqMan Probes *Low ROX* at room temperature. Vortex qPCR Master Mix thoroughly before use.

1. Prepare one of the following reaction mixes as indicated in Table 1.
2. Carefully mix the reagents with a gentle vortex followed by a brief centrifuge.
3. Set up the plate in the qPCR instrument and run as indicated in Table 2.

Table 1. Reagents composition per well for each reaction

Components	Volume (25 µL/reaction)	Volume (50 µL/reaction)	Final Conc.
TAQuest™ qPCR Master Mix for TaqMan Probes *Low ROX*	12.5 µL	25 µL	1X
Upstream primer, 10 µM	0.25-2.5 µL	0.5-5.0 µL	0.1-1.0 µM
Downstream primer, 10 µM	0.25-2.5 µL	0.5-5.0 µL	0.1-1.0 µM
TaqMan Probes, 10 µM	0.25-0.625 µL	0.5-1.25 µL	100-250 nM
DNA template	1-5 µL	1-5 µL	Optimized conc.
Nuclease-Free Water to	25 µL	50 µL	

Table 2. Thermal cycling parameters

Parameter	Polymerase Activation	PCR (30-40 cycles)		
	Hold	Denature	Anneal	Extend
Temperature	95 °C	95 °C	55-65 °C	68-72 °C
Time (m:ss)	0:20	0:30	1:00	1:00

EXAMPLE DATA ANALYSIS AND FIGURES

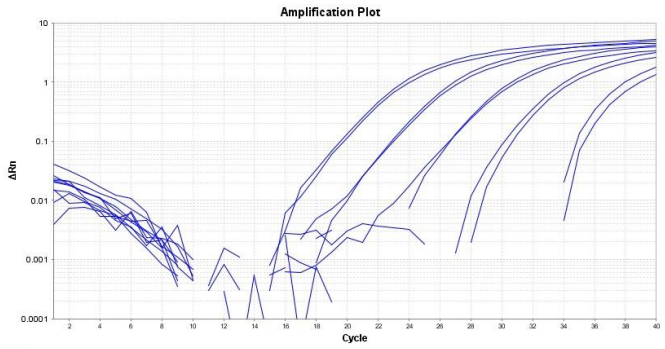

Figure 1. Amplification plot for a dilution series of HeLa cells cDNA amplified in replicate reactions to detect GAPDH using TAQuest™ qPCR Master Mix for TaqMan Probes *Low ROX*.

DISCLAIMER

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