

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

 Catalog number: 17290, 17291
 Unit size: 1 mL, 5 mL

Component	Storage	Amount (Cat No. 17290)	Amount (Cat No. 17291)
TAQuest™ FAST qPCR Master Mix for TaqMan Probes *Low ROX*	Freeze (< -15 °C), Minimize light exposure	1 mL	5 mL

OVERVIEW

TAQuest™ FAST qPCR Master Mix for TaqMan Probes is a ready-to-use 2X solution optimized for qPCR and 2-step RT-qPCR well suited to use for TaqMan gene expression assays. The master mix is compatible with FAST conditions, thus delivers results within 50 minutes for 40 cycles of PCR in a 20 µL reaction volume. The master mix provides all of the essential components including our proprietary TAQuest™ FAST Hot Start Taq DNA Polymerase enzyme and dNTPs in an optimized PCR buffer, except the template, primers and probes. TAQuest™ FAST qPCR Master Mix for TaqMan Probes has been designed to be used for duplex reactions using internal positive controls with superior performance. The master mix ensures PCR specificity and sensitivity with all sample types such as genomic, plasmid, viral and cDNA templates. 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™ FAST 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™ FAST 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	60 °C
Time (m:ss)	0:10	0:20	0:30

EXAMPLE DATA ANALYSIS AND FIGURES

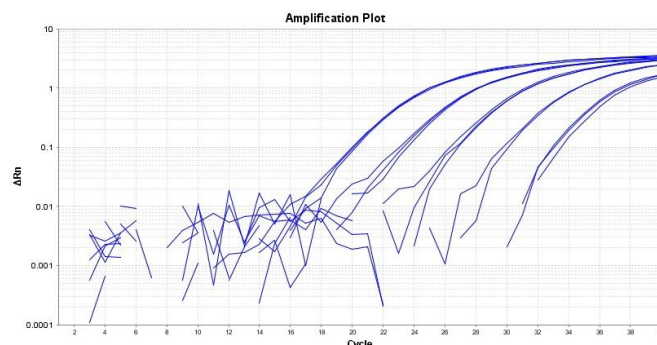


Figure 1. Amplification plot for a dilution series of HeLa cells cDNA amplified in replicate reactions to detect GAPDH using TAQuest™ qPCR Master Mix for TaqMan Probes *Low ROX*.

DISCLAIMER

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