TAQuest™ qPCR Master Mix with Helixyte™ Green *High ROX*

Catalog number: 17274, 17275
Unit size: 1 mL, 5 mL

Component	Storage	Amount (Cat No. 17274)	Amount (Cat No. 17275)
TAQuest™ qPCR Master Mix with Helixyte™ Green *High ROX*	Freeze (< -15 °C), Minimize light exposure	1 mL	5 mL

OVERVIEW

TAQuest™ qPCR Master Mix with Helixyte™ Green is a ready-to-use 2X solution optimized for qPCR and 2-step RT-qPCR. The master mix includes our proprietary TAQuest™ Hot Start Taq DNA Polymerase enzyme and dNTPs in an optimized PCR buffer. You only need to add template and target primers to run the desired PCR reactions. The Hot Start Taq DNA polymerase allows you to set up a PCR reaction at room temperature, thus minimizing non-specific product formation. In combination with an optimized buffer, the enzyme ensures PCR specificity and sensitivity with all sample types such as genomic, plasmid, viral and cDNA templates. The Helixyte Green intercalating dye allows rapid DNA detection and analysis without using sequence-specific probes. This master mix contains a high amount of ROX reference dye.

KEY PARAMETERS

qPCR

Instrument specification(s) SYBR Green filter

SAMPLE EXPERIMENTAL PROTOCOL

The following protocol can be used as a guideline.

Note Thaw the TAQuest™ qPCR Master Mix with Helixyte™ Green *High 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 with Helixyte™ Green *High 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
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

DISCLAIMER

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