Product Manual Cat. No: #2401

qProbe Mix Separate ROX

Description

qProbe Mix is a universal one-step probe mix for robust, sensitive, and fast qPCR. The mix uses state-of-the-art technologies with an antibody-regulated hot-start *Taq* polymerase for real-time PCR amplification of single or multiplex DNA targets in a single reaction chamber or tube. The optimized buffer chemistry and PCR enhancers and stabilizers enable rapid and sensitive qPCR.

qProbe Mix is compatible with several probes such as TaqMan® and Scorpions®. This allows rapid detection and quantification of a variety of DNA targets including complex and GC- and AT-rich DNA targets.

Kit Components

Component	S pack*	M pack*
qProbe Mix No-ROX 2x	1 mL	5 x 1 mL
50 µM ROX Additive	0.2 mL	0.2 mL

^{*}Other pack sizes, bulk orders and customization are available upon request.

Storage and Shipment

Transport with an ice pack. The reagents should be stored at -20°C upon arrival. The reagents are stable until the expiration date if stored correctly or for 1 month at 4°C.

Reaction Master Mix Set-Up

The recommended master mix set-up for a 20 μ L reaction volume is shown in the table below.

For ROX additive use: If your qPCR instrument requires ROX correction, the 50 μM ROX Additive supplied is formulated to be added directly to the 1 mL tube of qProbe Mix. Once the ROX is added, the reagent may be used straight away or stored at -20 °C for future use. Add 20 μL of ROX additive for HI-ROX or 2 μL of ROX additive for LOW-ROX to the 1 mL tube of qProbe Mix. The final concentration after reaction set up will be 500 nM for HI-ROX and 50 nM for LOW-ROX instruments.

Reagent	Volume (μL)	Final concentration
qProbe Mix 2x (ROX additive optional)	10	1x
∞Forward primer (10μM)	0.8 µL	400 nM
∞Reverse primer (10µM)	0.8 μL	400 nM
∞Probe (10µM)	0.4 µL	200 nM
∞∞DNA/cDNA template	х	Variable
Nuclease-free Water	Up to 20 µL final volume	

∞Primers and probes should be specific to the target DNA/RNA of interest. The recommended Tm for primers is between 56°C and 60°C, and the Tm for probes should be between 65°C and 70°C

∞∞Recommended template concentrations are <5 ng/µl for cDNA and <50 ng/µl for genomic DNA.

Instrument and Program Set-Up

Cycles	Steps	Temperature	Time
1	Polymerase activation	95°C	2-3 min
40	Denaturation	95°C	5 sec
	**Annealing/Extension	60°C	30 sec

^{**}The annealing/extension step can optionally be reduced to 20 seconds. Do not exceed 30 seconds, do not use temperatures below 60°C.