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Medix Biochemica

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Product Manual
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qGreen Mix Separate ROX

Description

qGreen Mix is a universal intercalating dye mix for robust, sensitive, and fast qPCR. qGreen Mix uses state-of-the-art technologies with an antibody-regulated hot-start Taq polymerase and intercalating dye for real-time PCR amplification/detection in a single reaction chamber or tube. The optimized buffer chemistry and PCR enhancers and stabilizers enable rapid and sensitive qPCR.

qGreen Mix antibody hot-start technology prevents the formation of primer dimers and non-specific reactions. The enzyme is compatible with fast and standard cycling and a variety of DNA templates such as GC- and AT-rich DNA templates.

Kit Components

Component	S pack*	M pack*
qGreen 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 µL reaction volume is shown in the following table.

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 qGreen 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 qGreen 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
qGreen Mix 2x (ROX additive optional)	10	1x
∞Forward primer (10µM)	0.8 µL	400 nM
∞Reverse primer (10µM)	0.8 µL	400 nM
∞∞DNA/cDNA template	X	Variable
Nuclease-free Water	Up to 20 µL final volume	

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