

# Accuris™ qMAX™ Green qPCR Mix, with Blue Tracking Dye

## Description

The qMAX Green qPCR Mix, with blue tracking dye is a ready-to-use, ultra-stable 2x master mix for use in real-time quantitative PCR assays with the option of post amplification melt profiles. The 2x master mix contains a non-inhibitory intercalating dye, HS Taq DNA Polymerase, and an optimized buffer with an inert blue tracking dye for easy visualization when pipetting. The mix provides robust real-time PCR with earlier cycle values (Ct) and broad range detection for increased sensitivity, speed, and room temperature stability. Ideal for genomic DNA, cDNA, & dilute templates.

- Ideal for fluorescent DNA/cDNA detection, gene expression analysis and sequence variant screening.
- Utilizes high quality, Accuris Hot Start Taq Polymerase to reduce nonspecific binding and provide easy reaction set up.
- A unique combination of salts, pH and PCR enhancers allow for detection of dilute targets and earlier  $C_t$  values.
- Contains an inert blue tracking dye to facilitate pipetting/visualization in plates.

## Storage

Upon receipt, immediately store at -20°C. Avoid excessive freeze/thaw cycles. When stored as directed, this product will retain its activity for 12 months from date of receipt. The product may also be stored at 4°C for up to one month.

## Limitations of Use

For research purposes only. Not intended for therapeutic or diagnostic use. Accuris qMAX mixes are tested for efficiency, activity, sensitivity, processivity, heat activation, and absence of nuclease and nucleic acid contamination. This product is manufactured under a comprehensive quality management system, following ISO 9001:2015 standards.

## General Guidelines

### 1. 2X Taq Master Mix

The Master Mix contains HS Hot Start DNA polymerase, a proprietary, fluorescent binding dye, dNTPs and an optimized buffer designed specifically for maximum efficiency, sensitivity and successful quantitative PCR.

### 2. Amplicon

The optimal amplicon length should from 80 to 200 base pairs. Length should not exceed 400 base pairs.

### 3. Primers

Primers should have a predicted melting temperature ( $T_m$ ) of approximately 60°C, using primer design software such as Primer 3 (<http://frodo.wi.mit.edu/primer3>) or visual OMPM (<http://dnasoftware.com/>).

### 4. Reference Dyes (ROX™)

ROX passive reference dyes are required by some real-time PCR instruments. Not all instruments require the same level of ROX, and many of the newer instruments do not require passive reference but include the option to use it for normalization.

## Technical Support

For trouble-shooting and tech support, contact us by phone at 908 769-5555 or email [info@accuris-usa.com](mailto:info@accuris-usa.com). When possible, please include instrument model, reaction conditions, PCR parameters, amplicon size and any traces and melting profiles.

## Reaction setup

Briefly vortex the 2X mix before adding to the reaction

Component	20 µl reaction	Final concentration
Accuris qMAX 2X Green Master Mix	10 µl	1X
Forward Primer (10µM)	0.8 µl	400 nM
Reverse Primer (10µM)	0.8 µl	400 nM
Template DNA	<100 ng cDNA, <1 µg genomic	variable
PCR-grade water	Up to 20µl final reaction volume	

For other volumes, adjust the amount of each component accordingly.

Gently mix the solution. If needed, spin briefly in a microcentrifuge to bring reaction mixture to the bottom of the tube. Transfer samples to a real time thermal cycler, acquiring data on the SYBR Green or FAM channel.

## PCR Program

Step	Temperature	Time
Initial denaturation	95°C	2-5min. (3+ min. for genomic DNA)
40 cycles*	95°C	5 seconds
	60° - 65°C	10-40 seconds
Melt Analysis (optional)		

\*Do not use temperatures below 60° or exceed 30 seconds.

Accuris guarantees the performance of this product as described when used in accordance with these instructions. It is the responsibility of the purchaser to determine the suitability of this product for their particular application.

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## Package contents and reordering

Accuris qMAX Green qPCR Mix, with blue tracking dye is supplied in 100, 500 and 1000 reaction (20µl) packages.

### Accuris qMAX Green qPCR Master Mix, with Blue tracking dye - Sample (20 rxns)

Catalog number: Low ROX - PR2000-L-S  
Catalog number: Low ROX - PR2000-L-S  
Includes 200µl of 2X Master Mix (20 rxns)

### Accuris qMAX Green qPCR Master Mix, with Blue tracking dye, 100 rxns

Catalog number: Low ROX - PR2000-L-100  
Includes 1.0ml of 2X Master Mix (100 rxns)

### Accuris qMAX Green qPCR Master Mix, with Blue tracking dye, 500 rxns

Catalog number: Low ROX - PR2000-L-500  
Includes 5x1.0ml of 2X Master Mix (500 rxns)

### Accuris qMAX Green qPCR Master Mix, with Blue tracking dye, 1000 rxns

Catalog number: Low ROX - PR2000-L-1000  
Includes 10x1.0ml of 2X Master Mix (1000 rxns)

\* Use -N/L/H to indicate ROX requirements (ex: PR2000-L-100 = Low ROX mix \*)



**qMAX™ Green qPCR Mix, with Blue Tracking Dye**

No ROX  Sample

Low ROX  100 rxns

High ROX  500 rxns

1000 rxns

Store at -20°C upon receipt.

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