# Accuris™ qMax™ Probe No ROX qPCR Mix

## Description

Accuris qMax Probe No ROX qPCR Mix is a single tube formulation for sensitive and efficient real-time, quantitative PCR assays utilizing probe detection technologies, including TaqMan®, Scorpions® and molecular beacon probes. The mix is optimized for earlier threshold detection cycles ($C_t$), fast cycling with exceptional, reproducible results and low PCR inhibition.

Refer to www.accuris-usa.com/PCR-Reagents to determine the ROX level appropriate for your specific cycler.

- -Ideal for multiplex qPCR, two step RT-PCR, gene expression analysis, probe based detection of DNA/cDNA and screening of sequence variants.
- -Utilizes high quality, Accuris Hot Start Taq Polymerase to reduce the formation of primer-dimers and provide easy reaction set up on the bench.
- -Unique buffer formulation works for both single and multiplex qPCR.
- -Compatible with both standard and fast cycling protocols.

## 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.

## Quality Control

Accuris qPCR 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 9001:2008 standards.

## General Guidelines

1. *2X Taq Master Mix*

The Master Mix contains Accuris Taq Hot Start DNA polymerase, 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 (Tm) of approximately 60°C, using primer design software such as Primer 3 (http://frodo.wi.mit.edu/primer3) or visual OMPTM (http://dnasoftware.com/). Probe Tm should be 6° - 10°C higher than that of the primers. For TaqMan® probes, avoid terminal guanosine residues by choosing a probe close to the 5′ primer.

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. To determine which kit matches the ROX level required by your instrument, visit www.accuris-usa.com/PCR-Reagents.

## Technical Support

For trouble-shooting and tech support, contact us by phone at 908 769-5555 or email 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 Probe Master Mix | 10 µl | 1X |
| Forward Primer (10µM) | 0.8 µl | 400 nM |
| Reverse Primer (10µM) | 0.8 µl | 400 nM |
| Probe (10µm) | 0.4µl | 200 nM |
| Template DNA | <100 ng cDNA, <1 µg genomic | variable |
| PCR-grade water | to 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 appropriate channel.

*PCR Program*

| Step | Temperature | Time |
|---|---|---|
| Initial denaturation | 95°C | 2 minutes (3 minutes for gemonic DNA) |
| 40 cycles* | 95°C | 5 seconds |
| | 60° - 65°C | 20-30 seconds |
| Melt Anaylsis (optional) | | |

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

## Package contents and reordering

Accuris qMax Probe No ROX qPCR Master Mix, supplied in 100, 500 and 1000 reaction (20µl) packages.

***Accuris qMax Probe No ROX qPCR Master Mix, Sample Pack***
Catalog number PR2001-N-S
Includes 200µl of 2X Master Mix (20 rxns)

***Accuris qMax Probe No ROX qPCR Master Mix, 100 reactions***
Catalog number PR2001-N-100
Includes 1.0ml of 2X Master Mix (100 rxns)

***Accuris qMax Probe No ROX qPCR Master Mix, 500 reactions***
Catalog number PR2001-N-500
Includes 5x1.0ml of 2X Master Mix (500 rxns)

***Accuris qMax Probe No ROX qPCR Master Mix, 1000 reactions***
Catalog number PR2001-N-1000
Includes 10x1.0ml of 2X Master Mix (1000 rxns)

Accuris offers a full line of PCR enzymes and master mixes. Visit www.accuris-usa.com for details.

ACCURIS
LIFE SCIENCE REAGENTS

Accuris™
qMax™ Probe
No ROX qPCR Mix

**One Tube Formulation, 2X Concentration**

Package contains:
1.0ml of 2X qMax Probe No ROX qPCR Mix
100 reactions, Based on 20µl total reaction volume

Store at -20°C upon receiptpt

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