

# SensiFAST™ Lyo-Ready No-ROX Mix

Shipping: On dry/blue ice Catalog numbers

BIO-11060: 10,000 x 20 µL reactions: 10 x 10 mL

Batch No.: See vial

BIO-11061: 500 x 20 µL reactions: 5 mL

Concentration: See vial

Store at **-20 °C**



## Storage and stability:

SensiFAST Lyo-Ready No-ROX Mix is shipped on dry/blue ice. All kit components should be stored at -20°C upon receipt. Excessive freeze/thawing is not recommended.

## Expiry:

When stored under the recommended conditions and handled correctly, full activity of the kit is retained until the expiry date on the outer box label.

## Quality Control:

Bioline operates under ISO 13485 Management System. The SensiFAST Lyo-Ready No-ROX Mix and its components are extensively tested for activity, processivity, efficiency, heat activation, sensitivity, absence of nuclease contamination and absence of nucleic acid contamination.

## Safety Precautions:

Please refer to the material safety data sheet for further information.

## Notes:

For research or further manufacturing use only.

## Trademarks:

SensiFAST (Bioline Reagents Ltd), SYBR (Molecular Probes), ROX, iCycler MyiQ5, Opticon, Chromo4, MiniOpticon (BioRad), LightCycler (Roche), StepOne (ABI), SmartCycler (Cepheid), RotorGene (Qiagen), RealPlex (Eppendorf), Quantica (Techne), MX4000 (Stratagene).

## Description

SensiFAST™ Lyo-Ready No-ROX Mix is a glycerol-free qPCR mix containing Taq polymerase, reaction buffer, dNTP, MgCl<sub>2</sub> and lyo-excipients. SensiFAST Lyo-Ready No-ROX Mix is optimized for fast, multiplex amplification of high- and low-copy targets.

In order to produce room temperature lyophilized qPCR reagents, assay specific primers and probes are added to SensiFAST Lyo-Ready No-ROX Mix for subsequent lyophilization. Millisecond rehydration times make SensiFAST Lyo-Ready No-ROX Mix ideal for automated, high-throughput systems.

## Kit components

Table 1

| Reagent                             | 10,000 Reactions | 500 Reactions |
|-------------------------------------|------------------|---------------|
| SensiFAST Lyo-Ready No-ROX Mix (2x) | 10 x 10 mL       | 5 mL          |

## Instrument compatibility

SensiFAST Lyo-Ready No-ROX Mix is compatible with qPCR instruments that do not need a passive reference signal for normalization of the data. SensiFAST Lyo-Ready No-ROX Mix has been optimized for use on the qPCR instruments listed in Table 2.

| Manufacturer | Model  |
|--------------|--|
| Bio-Rad      | iCycler®, iQ™5, MyiQ™, Opticon™, Opticon2™, MiniOpticon, Chromo4™, CFX96, CFX384 |
| BMS          | Mic  |
| Cepheid      | SmartCycler™   |
| Eppendorf    | Mastercycler® ep realplex  |
| Qiagen       | Rotor-Gene™ 3000 & 6000  |
| Roche        | LightCycler® 480   |
| Takara       | Thermal Cycler Dice® (TP800)   |
| Techne       | Quantica®  |

Table 2  
**Pre-lyophilization master mix preparation guidelines**

Prepare a master mix of SensiFAST Lyo-Ready No-ROX Mix (2x) and assay-specific primers and probes (see recommended composition in Table 3). Dispense into reaction vials and immediately transfer into a freeze-dryer and run suitable drying cycle.

Table 3

| Reagent                                     | Volume         | Final concentration |
|---|----------------|---------------------|
| 2x SensiFAST Lyo-Ready No-ROX Mix           | 10 µL          | 1x                  |
| 20 µM Forward Primer                        | 0.4 µL         | 400 nM              |
| 20 µM Reverse Primer                        | 0.4 µL         | 400 nM              |
| 10 µM Probe                                 | 0.2 µL         | 100 nM              |
| <b>Pre-Lyophilization Master Mix Volume</b> | <b>≤20 µL*</b> |                     |

\*Ensure that the pre-lyophilization master mix volume does not exceed the final reaction volume

For long-term storage at ambient temperature, the lyophilized qPCR master mix should be contained in a controlled, moisture-free environment.

## qPCR mix setup guidelines

Rehydrate the lyophilized qPCR master mix in the reaction vials with 20 µL template-containing solution and run qPCR.

The qPCR conditions in Table 4 are suitable for SensiFAST Lyo-Ready No-ROX Mix with amplicons of up to 200 bp. These cycling parameters have been optimized on a number of platforms, however they can be varied to suit different machine-specific protocols.

Table 4

| Cycles | Temperature | Time  | Notes  |
|--------|-------------|-------|--|
| 1      | 95 °C       | 2 min | Polymerase activation                        |
| 40     | 95 °C       | 10 s  | Denaturation                                 |
|        | 60 °C       | 30 s  | Annealing/extension (acquire at end of step) |

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