

# Product Information

## ROX Reference Dye, 25 $\mu$ M in TE Buffer

Catalog Number: R2012

Product Size: 1 mL

Application Scope: Real-time PCR Reference Dye

### Parameters

Ex/Em: 568/591 nm

### Storage

Store at  $-20^{\circ}\text{C}$  for a long time, protect from light and avoid repeated freeze-thaw. Short-term use can be stored at  $4^{\circ}\text{C}$ .

Expiration date marked on the outer packing.

### Description

ROX reference dye is used to normalize well-to-well variations that may occur during quantitative, real-time PCR reactions. The concentration of ROX reference dye is different for different instruments. Our company provides ROX reference dye storage solution with a concentration of  $25\ \mu\text{M}$ , which users can add according to the recommended concentration of the instrument.

### ROX Reference Dye

- Normalize PCR-independent fluorescence fluctuations
- Provide stable baselines for multiplex quantitative PCR and RT-PCR
- Use existing ROX spectral settings without the need to repeatedly calibrate the thermal cycler

### Notes

1. In order to add  $0.1\ \mu\text{L}$  accurately for each reaction, it is recommended to dilute ROX with water before use, and then perform experimental protocol.
2. There are quenching problems with fluorescent dyes. Please try to avoid light to slow down the fluorescence quenching.
3. For your safety and health, please wear lab clothes and disposable gloves.

### Recommended final concentrations of ROX for different instruments:

Instrument	ROX per 50 $\mu\text{L}$ PCR Reaction	Final Concentration
ABI PRISM 7000/7300/7700/7900HT and 7900HT Fast, ABI Step One, ABI Step One Plus	$1.0\ \mu\text{L}$ ( $0.6\text{-}1.0\ \mu\text{L}$ )	$500\ \text{nM}$ ( $300\text{-}500\ \text{nM}$ )
ABI 7500, 7500 Fast, Stratagene Mx3000P, Mx3005P, Mx4000, MJ Research Chromo4, OPtcon(II), Corbet Rotor Gene 3000	$0.1\ \mu\text{L}$ ( $0.06\text{-}0.1\ \mu\text{L}$ )	$50\ \text{nM}$ ( $30\text{-}50\ \text{nM}$ )

