## **Product Data Sheet**



5-ROX SE

Catalog ID: 140901 Revised: 2025-01-31

## **Description**

ROX (Rhodamine X, R101) is a highly fluorescent and photostable rhodamine dye used in a variety of applications. ROX-labeled oligonucleotide probes are commonly employed in qPCR, and most qPCR instruments are equipped with a ROX detection channel.

This reactive dye is designed for labeling amino groups in peptides, proteins, and amino-modified oligonucleotides. It is available as a pure single isomer, ensuring consistent performance.

5-ROX, SE is a purified single isomer of 5(6)-ROX, SE and is primarily used for labeling nucleotides and sequencing nucleic acids. However, compared to other rhodamine dyes, ROX is relatively unstable. Care must be taken to prevent deterioration during storage, such as by protecting it from light and moisture and storing it at recommended temperatures.

## **Chemical Properties**

CAS number	209734-74-7	^ ^
Formula	C <sub>37</sub> H <sub>33</sub> N <sub>3</sub> O <sub>7</sub>	N 0 N
Molecular Weight	631.67	
HPLC Purity	≥95%	CO <sub>2</sub> -
$\lambda_{abs}$ (nm)	578	
$\epsilon_{\text{max}}$ (M <sup>-1</sup> cm <sup>-1</sup> )	8.2×10 <sup>4</sup>	o o N
$\lambda_{\rm fl}$ (nm)	604	Ö
$CF_{260} = \varepsilon_{260}/\varepsilon_{max}$	NA	
$CF_{280} = \varepsilon_{280}/\varepsilon_{max}$	NA	

## **Storage**

Upon receipt, store at -20°C in the dark. Protect from light and moisture. When stored as indicated, 5-ROX SE is stable for at least 1 year.

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use