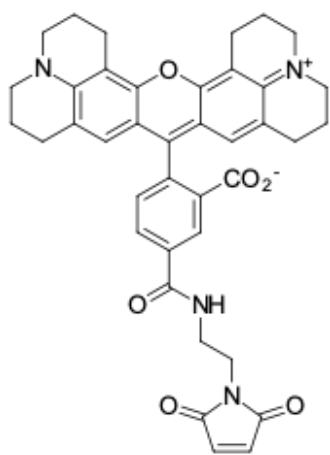


ROX maleimide, 5-isomer

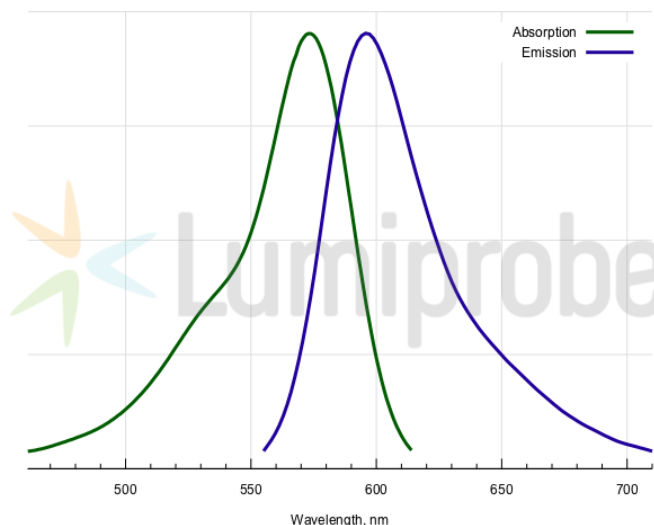
<http://www.lumiprobe.com/p/rox-maleimide-5>

ROX is a bright rhodamine dye with emission maximum around 580 nm. It is widely used for the labeling of biomolecules. As other rhodamine dyes, it comes as two isomers, 5-ROX and 6-ROX. Although these isomers have almost identical spectral properties, they need to be separated to avoid doubling of labeled products on HPLC or electrophoresis.

This derivative contains thiol-reactive maleimide moiety for the attachment of ROX fluorophore to SH groups, such as cystein residues in proteins and peptides.



Structure of 5-ROX maleimide



Absorption and emission spectra of ROX

General properties

Appearance:	red powder
Mass spec M+ increment:	656.3
Molecular weight:	656.73
Molecular formula:	C ₃₉ H ₃₆ N ₄ O ₆
Solubility:	good in DMSO, DMF
Quality control:	NMR ¹ H, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

Spectral properties

Excitation/absorption maximum, nm:	570
ε, L·mol ⁻¹ ·cm ⁻¹ :	93000
Emission maximum, nm:	591
Fluorescence quantum yield:	1.00
CF ₂₆₀ :	0.62
CF ₂₈₀ :	0.49