



## CERTIFICATE OF ANALYSIS

Product **TEXAS RED<sup>®</sup> MALEIMIDE**

Catalog No. SP-1505

Amount 3.6 mg

Lot No. ZE0410

Storage -20 °C to -80 °C.

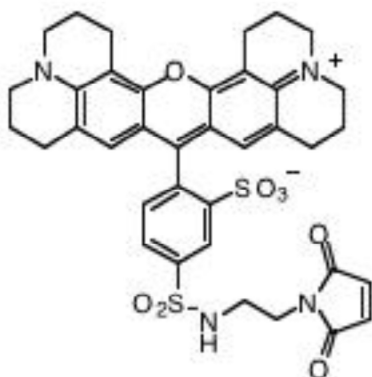
Empirical formula  $C_{37}H_{36}N_4O_8S_2$

MW 728

$\lambda_{ex}$  592nm

$\lambda_{em}$  614nm

Structure:



Texas Red<sup>®</sup> Maleimide is designed for fluorescent labeling of proteins<sup>1</sup>, nucleic acids<sup>2</sup> or other molecules containing one or more thiol groups. Molecules to be labeled with Texas Red<sup>®</sup> Maleimide require free thiol groups. In the case of proteins, Texas Red<sup>®</sup> Maleimide will react with exposed cysteine residues. Alternatively, free thiols may be generated by reducing disulfide bonds or by modifying other reactive groups such as primary amines with compounds like Traut's reagent (2-iminiothiolane). Once free thiol groups are available, labeling can be carried out as outlined below. For labeling nucleic acids, thiols can be introduced into DNA, RNA, or oligonucleotides using the FastTag<sup>®</sup> 2, 5' EndTag<sup>™</sup> or 3' EndTag<sup>™</sup> nucleic acid labeling systems.

Note: Labeled DNA standard (50  $\mu$ l of  $\lambda$ Hind III, 2.0 ng/ $\mu$ l in TE) is provided as a control for the FastTag<sup>®</sup> nucleic acid labeling protocol and is not intended for use in the procedure for labeling proteins. TE = 10 mM Tris, pH 8.0, 1 mM EDTA.

*(see instructions for use and references on the reverse side)*