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Product Information

Sulforhodamine 101 acid chloride

Product Number **S 3388**

Storage Temperature -0°C

Replacement for Product Code 28,406-8

Product Description

Molecular Formula: $\text{C}_{31}\text{H}_{29}\text{ClN}_2\text{O}_6\text{S}_2$

Molecular Weight: 625.2

CAS Number: 82354-19-6

λ_{max} : 578 nm (ethanol)¹

Fluorescence Properties

Excitation wavelength: 594 nm

Emission wavelength: 623 nm

Synonym: Texas Red

This is a red-emitting fluorophore. It has been covalently bound to primary amino functions in proteins and other biological substrates.² It has been used in multi-color immunofluorescence systems^{3,4} and in laser-flow cytometry.^{5,6}

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product will give a deeply colored solution when dissolved in methanol (10 mg/ml). It is also soluble in ethanol, acetone, and water (the latter with hydrolysis).¹

Storage/Stability

Texas Red is unstable in water, especially at the higher pH required for reaction with aliphatic amines. Dilute solutions are completely hydrolyzed within 2-3 minutes in a pH 8.5 aqueous solution at room temperature. Protein modifications using this compound are best done at low temperatures. Once it is conjugated, however, the sulfonamides that are formed are extremely stable, even surviving complete protein hydrolysis.

References

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3. Loken, M. R., and Lanier, L. L., Three-color immunofluorescence analysis of Leu antigens on human peripheral blood using two lasers on a fluorescence-activated cell sorter. *Cytometry*, **5(2)**, 151-158 (1984).
4. Lanier, L. L., and Loken, M.R., Human lymphocyte subpopulations identified by using three-color immunofluorescence and flow cytometry analysis: correlation of Leu-2, Leu-3, Leu-7, Leu-8, and Leu-11 cell surface antigen expression. *J. Immunol.*, **132(1)**, 151-156 (1984).
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6. Weichel, W., et al., Inexpensive upgrading of a FACS I and isolation of rare somatic variants by double-fluorescence sorting. *Cytometry*, **6(2)**, 116-123 (1985).

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