

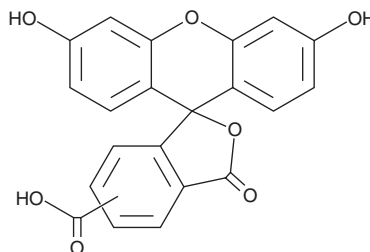
PRODUCT INFORMATION



5(6)-Carboxyfluorescein

Item No. 17172

CAS Registry No.: 72088-94-9
Formal Name: 3',6'-dihydroxy-3-oxo-spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-ar-carboxylic acid
Synonym: 5(6)-FAM
MF: C₂₁H₁₂O₇
FW: 376.3
Purity: ≥90% (mixture of isomers)
UV/Vis.: λ_{max}: 209, 225, 277 nm
Ex./Em. Max: 492/514 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

5(6)-Carboxyfluorescein is supplied as a crystalline solid. A stock solution may be made by dissolving the 5(6)-carboxyfluorescein in the solvent of choice, which should be purged with an inert gas. 5(6)-Carboxyfluorescein is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 5(6)-carboxyfluorescein in these solvents is approximately 5, 0.5, and 1 mg/ml, respectively.

5(6)-Carboxyfluorescein is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 5(6)-carboxyfluorescein should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 5(6)-Carboxyfluorescein has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

5(6)-Carboxyfluorescein is a mixture of 5-carboxy and 6-carboxy derivatives of fluorescein. It is commonly used to label biomolecules through a reaction involving the carboxyl group.¹ Unlike its succinimidyl ester derivative CFSE (Item No. 14456), 5(6)-carboxyfluorescein is membrane impermeant. As a result, it can be used in studies of membrane permeability.² 5(6)-Carboxyfluorescein displays excellent fluorescence (excitation/emission at 492/514 nm, respectively), and its excitation maximum closely matches the 488 nm spectral line of argon-ion lasers.

References

1. Fischer, R., Mader, O., Jung, G., *et al.* Extending the applicability of carboxyfluorescein in solid-phase synthesis. *Bioconjugate Chem.* **14**, 653-660 (2003).
2. Ferdani, R., Li, R., Pajewski, R., *et al.* Transport of chloride and carboxyfluorescein through phospholipid vesicle membranes by heptapeptide amphiphiles. *Org. Biomol. Chem.* **5(15)**, 2423-2432 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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