

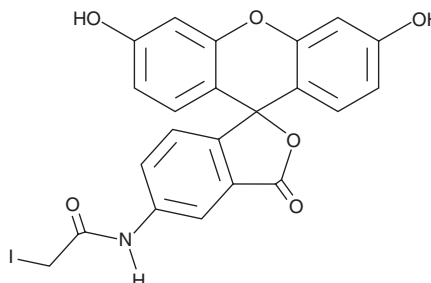
PRODUCT INFORMATION



5-IAF

Item No. 26807

CAS Registry No.: 63368-54-7
Formal Name: N-(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)-2-iodo-acetamide
Synonym: 5-Iodoacetamidofluorescein
MF: C₂₂H₁₄INO₆
FW: 515.3
Purity: ≥90%
UV/Vis.: λ_{max}: 227, 275, 457 nm
Ex./Em. Max: 491/518 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-IAF is supplied as a crystalline solid. A stock solution may be made by dissolving the 5-IAF in the solvent of choice, which should be purged with an inert gas. 5-IAF is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 5-IAF in ethanol is approximately 0.5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

5-IAF is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 5-IAF should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 5-IAF has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

5-IAF is a fluorescent probe for labeling proteins.¹ It has been used to label proteins through a reaction with sulfhydryl groups. 5-IAF displays excitation/emission maxima of 491/518 nm, respectively, which can shift during protein labeling or changes in hydrophobicity and can be quenched by potassium iodide. 5-IAF has been used to monitor ligand binding and conformational changes of the Na⁺/K⁺-ATPase.²

References

1. Hartig, P.R., Bertrand, N.J., and Sauer, K. 5-Iodoacetamidofluorescein-labeled chloroplast coupling factor 1: Conformational dynamics and labeling-site characterization. *Biochemistry* **16**(19), 4275-4282 (1977).
2. Kapakos, J.G. and Steinberg, M. Ligand binding to (Na,K)-ATPase labeled with 5-iodoacetamidofluorescein. *J. Biol. Chem.* **261**(5), 2084-2089 (1986).

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.

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