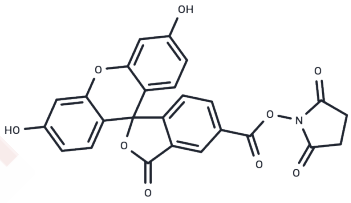
Data Sheet (Cat.No.T14049)

TargetMol

5-FAM SE

Chemical Properties



CAS No. : 92557-80-7

Formula: C25H15NO9

Molecular Weight: 473.39

Storage: Store at low temperature,Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	5-FAM SE is a single isomer widely employed in the preparation of various small fluorescent molecules. It is a highly popular green fluorescent reagent used for labeling peptides, proteins, and nucleotides [5-FAM SE].
Targets(IC50)	Others
In vitro	Instructions: 1. Preparation of 5-FAM SE solution: Dissolve 5-FAM SE in an appropriate solvent, such as DMSO or DMF, to prepare a high concentration stock solution. Note: Avoid vigorous stirring or shaking during dissolution to prevent fluorescence quenching. 2. Coupling reaction: 1) Mix the 5-FAM SE solution with the target biomolecule and use an appropriate buffer (usually pH 8-9.5) to promote the reaction of the succinimidyl ester group with the amine group on the biomolecule. 2) Allow the reaction mixture to incubate for an appropriate amount of time to ensure that the coupling is complete. 3. Purification: 1) After the reaction, the labeled biomolecule needs to be purified to remove unreacted 5-FAM SE and byproducts. 2) Common purification methods include dialysis, gel filtration, or chromatography, depending on the nature of the biomolecule. 4. Storage: Store the labeled biomolecule under recommended conditions, usually at -20°C, and protect from light to maintain its stability and fluorescence intensity. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 1 mg/mL (2.11 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1124 mL	10.5621 mL	21.1242 mL
5 mM	0.4225 mL	2.1124 mL	4.2248 mL
10 mM	0.2112 mL	1.0562 mL	2.1124 mL
50 mM	0.0422 mL	0.2112 mL	0.4225 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Brian A. Rabinovich, et al. Stress Renders T Cell Blasts Sensitive to Killing by Activated Syngeneic NK Cells1. J Immunol 1 September 2000; 165 (5): 2390–2397.

Zhang XL, et al. Sensitive determination of pheomelanin after 5-carboxyfluorescein succinimidyl ester precapillary derivatization and micellar electrokinetic capillary chromatography with laser-induced fluorescence detection. J Chromatogr B Analyt Technol Biomed Life Sci. 2008 Jan 1;861(1):136-9.