

# PRODUCT INFORMATION

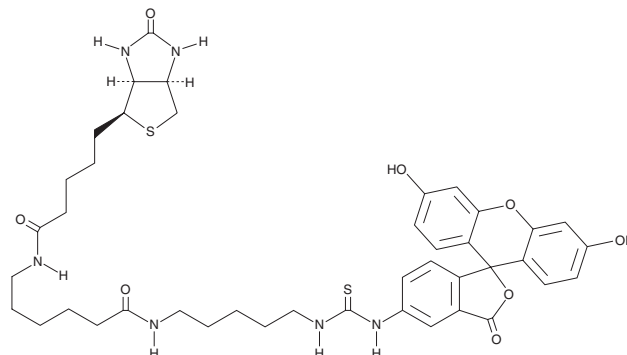


## Fluorescein Biotin

Item No. 25574

**CAS Registry No.:** 134759-22-1  
**Formal Name:** (3a*S*,4*S*,6a*R*)-*N*-[6-[[[5-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3*H*),9'-[9*H*]xanthen]-5-yl)amino]thioxomethyl]amino]pentyl]amino]-6-oxohexyl]hexahydro-2-oxo-1*H*-thieno[3,4-*d*]imidazole-4-pentanamide

**Synonym:** FITC Biotin  
**MF:** C<sub>42</sub>H<sub>50</sub>N<sub>6</sub>O<sub>8</sub>S<sub>2</sub>  
**FW:** 831.0  
**Purity:** ≥90%  
**UV/Vis.:** λ<sub>max</sub>: 222 nm  
**Ex./Em. Max.:** 485/535 nm  
**Supplied as:** A 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

Fluorescein biotin is supplied as a solid. A stock solution may be made by dissolving the fluorescein biotin in the solvent of choice, which should be purged with an inert gas. Fluorescein biotin is soluble in methanol, DMSO, and dimethyl formamide.

Fluorescein biotin is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Fluorescein biotin (FITC biotin) is a fluorescent biotin derivative and avidin and streptavidin ligand that contains a FITC fluorophore which displays excitation/emission maxima of 485/535 nm, respectively.<sup>1</sup> FITC fluorescence is quenched upon binding to avidin or streptavidin and decreases in fluorescence intensity have been used to quantify biotin binding stoichiometry.

### Reference

1. Chu, Y.H., Lees, W.J., Stassinopoulos, A., *et al.* Using affinity capillary electrophoresis to determine binding stoichiometries of protein-ligand interactions. *Biochemistry* **33**(35), 10616-10621 (1994).

#### 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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