

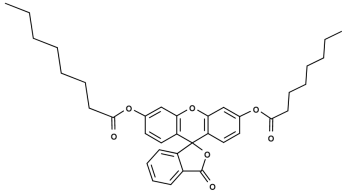
Fluorescein dicaprylate [Fluorescein dioctanoate]

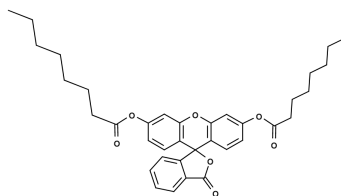
Catalog number: 22019
Unit size: 100 mg

Product Details

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Light yellow solid
Molecular Weight	584.70
Soluble In	DMSO
Chemical Structure	



Spectral Properties

Excitation Wavelength	498 nm
Emission Wavelength	517 nm

Applications

Fluorescein dicaprylate is a non-fluorescent hydrophobic fluorescein derivative that can pass through the cell membrane whereupon intracellular esterases hydrolyze the dicaprylate group producing the highly fluorescent product fluorescein. The fluorescein molecules accumulate in cells that possess intact membranes so the green fluorescence can be used as a marker of cell viability. Cells that do not possess an intact cell membrane or an active metabolism may not accumulate the fluorescent product and therefore do not exhibit green fluorescence. Fluorescein dicaprylate may be used in combination with PI staining as the non-viable cells take up the PI and stain dead cells red whereas viable cells do not take up the PI and should only stain green. Fluorescein dicaprylate may stain Salmonella in green fluorescence. It is a fluorogenic substrate for C8 esterase that generates green fluorescence upon esterase cleavage.