

mFluor™ Blue 580 acid

Catalog Number: 72100

Unit Size: 1 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid brown
Molecular Weight	837.11
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	485 nm
Emission Wavelength	580 nm

Applications

mFluor™ Blue 580 acid is a small-molecule, water-soluble fluorescent dye designed for high-performance fluorescence labeling in research applications, particularly multicolor and spectral flow cytometry. The dye is efficiently excited by blue laser sources, with an excitation maximum near 490 nm, and emits in the orange-red region with an emission maximum of ~580 nm. Its large Stokes shift enables effective spectral separation from other fluorophores and reduces signal overlap in complex multicolor experiments.

In its acid form, mFluor™ Blue 580 is non-reactive and may be used as a reference standard for mFluor™ Blue 580 conjugates or as a control reagent in confocal microscopy, immunocytochemistry (ICC), high-content screening (HCS), flow cytometry, and live-cell imaging. The dye is compatible with carbodiimide-mediated coupling chemistries, including EDC activation, enabling covalent conjugation to amine-containing biomolecules such as proteins, peptides, and antibodies. mFluor™ Blue 580 acid demonstrates good aqueous solubility and photostability, supporting consistent fluorescence signals during flow cytometric analysis and fluorescence imaging.