

iFluor® 405 acid

Catalog Number: 2901

Unit Size: 5 mg

Product Details

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

Chemical Properties

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| Appearance | Solid |
| Molecular Weight | 680.50 |
| Soluble In | DMSO |

Spectral Properties

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| Excitation Wavelength | 403 nm |
| Emission Wavelength | 427 nm |

Applications

iFluor® 405 is a blue-fluorescent dye with spectral properties similar to Cascade Blue and Alexa Fluor® 405, but with significantly improved brightness, water solubility, and photostability. With excitation and emission maxima at 403/427 nm, it is optimized for the 405 nm laser line, making it ideal for multicolor imaging platforms such as confocal microscopy and flow cytometry. The dye delivers stable performance across a broad pH range (pH 3 to 11), ensuring consistent fluorescence under varying experimental conditions. iFluor® 405 acid is the non-reactive form of the dye, suitable for use as a reference standard or fluorescence control in applications involving iFluor® 405 conjugates. It is compatible with a wide range of techniques, including immunocytochemistry, high-content screening, live-cell imaging, and flow cytometry. It can also be chemically modified to generate activated esters or STP derivatives and coupled to hydrazines, hydroxylamines, or amines using water-soluble carbodiimides such as EDAC, enabling efficient conjugation to proteins, antibodies, peptides, and amine-modified oligonucleotides.