

iFluor® 670 acid

Catalog Number: 2911

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 | N/A |
| Soluble In | DMSO |

Spectral Properties

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| Excitation Wavelength | 671 nm |
| Emission Wavelength | 682 nm |

Applications

AAT Bioquest's iFluor® dyes are designed for precise protein labeling, particularly for antibodies. These dyes exhibit excellent brightness, high photostability, and minimal quenching when conjugated to proteins. They can be well excited by the major laser lines used in fluorescence instrumentation, including 350, 405, 488, 555, and 633 nm. iFluor® 670, specifically, is a red-laser excitable dye optimized for flow cytometry applications, including spectral flow cytometry. It has spectral characteristics similar to Cy5B but demonstrates a higher fluorescence quantum yield and superior photostability. Additionally, iFluor® 670 maintains consistent fluorescence across a broad pH range (pH 3-11), making it a robust alternative to Cy5B.

iFluor® 670 acid is a non-reactive compound that can be employed as a reference standard in studies utilizing iFluor® 670 conjugates. It is also suitable for use as a control in confocal microscopy, immunocytochemistry (ICC), high-content screening (HCS), flow cytometry, and live cell imaging applications. Furthermore, it can be utilized in the synthesis of activated esters and STP and can be coupled to hydrazines, hydroxylamines, or amines in aqueous solutions using water-soluble carbodiimides (e.g., EDAC). This allows for the conjugation of the dye to amino-containing molecules, such as proteins, antibodies, amine-modified oligonucleotides, and peptides.