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AMCA NHS ester

http://www.lumiprobe.com/p/amca-nhs-ester

Activated NHS-ester of AMCA (aminomethyl coumarin acetate) dye. This NHS ester is an amine-reactive dye for labeling of amine groups in proteins, peptides, amino-modified oligos, and other target molecules.

AMCA is one of the brightest blue fluorescent dyes. This fluorophore has a relatively large Stoke's shift, high resistance to photobleaching, and pH-independent fluorescence from pH 4 to 10. AMCA is a widely used fluorophore for multiple-color labeling due to its minimal fluorescence overlap with green- and longer wavelength-emitting fluorescent dyes.

Structure of AMCA NHS ester

General properties

Appearance: gray powder

Mass spec M+ increment: 331.3 Molecular weight: 366.76

CAS number: 113721-87-2 Molecular formula: $C_{16}H_{15}CIN_2O_6$ Solubility: in DMSO, DMF

Quality control: NMR ¹H and HPLC-MS (95+%)

Storage conditions: 12 months after receival at -20°C in the dark. Transportation: at room temperature

for up to 3 weeks. Desiccate.

Spectral properties

Excitation/absorption maximum, nm: 348 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 17400 Emission maximum, nm: 435 Fluorescence quantum yield: 0.91 CF_{260} : 0.16 CF_{280} : 0.13