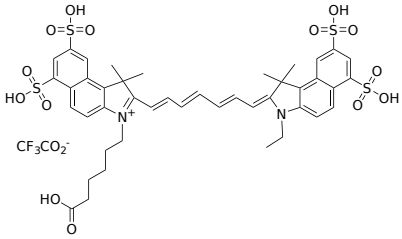
Cyanine 7.5 monoacid [equivalent to Cy7.5® acid]

Catalog Number: 167
Unit Size: 5 mg

Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	1057.10
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	785 nm
Emission Wavelength	801 nm

Applications

Various cyanine dyes have been extensively used to label biological molecules for fluorescence imaging and other fluorescence-based biochemical analyses. These dyes are commonly utilized for labeling peptides, proteins, and oligos. Among them, cyanine 7.5 (Cy7.5) is a notable near-infrared dye with an exceptionally long-wave emission. Its pH insensitivity over a wide molar range (pH 3-10), makes it suitable for an extensive range of applications at biologically relevant pH levels. Moreover, the NIR emission of Cy7.5 enables deep tissue penetration, making it ideal for in vivo imaging. These dyes are DMSO-tolerant and photostable, ensuring that they can be transferred from storage to assay without any loss of performance. Our Cy7.5 dyes undergo comprehensive quality control testing to ensure high levels of chromophore and reactive dye content. For labeling reactions, mono-reactive dyes are ideal for targeted, precise labeling of proteins and oligonucleotides, while bis-reactive dyes are more suitable for general protein labeling. NHS ester dyes are recommended for labeling amine groups, and maleimide dyes are suggested for labeling thiol groups.