iFluor® 790 amine

Catalog Number: 1362
Unit Size: 1 mg

Product Details

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

Chemical Properties

Appearance	Solid dark green
Molecular Weight	1213.22
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	787 nm
Emission Wavelength	812 nm

Applications

In vivo fluorescence imaging uses a sensitive camera to detect the fluorescence emission from fluorophores in whole-body living small animals. To overcome the photon attenuation in living tissue, fluorophores with long emission at the near-infrared (NIR) region are generally preferred, including widely used small indocarbocyanine dyes. Recent advances in imaging strategies and reporter techniques for *in vivo* fluorescence imaging include novel approaches to improve the specificity and affinity of the probes and to modulate and amplify the signal at target sites for enhanced sensitivity. Further emerging developments aim to achieve high-resolution, multimodality, and lifetime-based *in vivo* fluorescence imaging. Our iFluor® 790 is designed to label proteins and other biomolecules with near-infrared fluorescence. Conjugates prepared with iFluor® 790 have excitation and emission spectra similar to that of indocyanine green (ICG) and the IRDye® 800, with 787/812 nm excitation/emission maxima. iFluor® 790 dye emission is well separated from commonly used far-red fluorophores such as Cy5, Cy7, or allophycocyanin (APC), facilitating multicolor analysis. This fluorophore is also useful for small animal in-vivo imaging applications or other imaging applications requiring NIR detections, such as the two-color western applications with the LI-COR® Odyssey® infrared imaging system.