

iFluor™ 830 maleimide

Catalog number: 1383

Unit size: 1 mg

Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	1603.65
Soluble In	DMSO

Applications

Our iFluor® 830 is designed to label proteins and other biomolecules with infrared fluorescence. Conjugates prepared with iFluor® 830 have the excitation and emission in the IR range. iFluor® 830 maleimide is one of the most convenient reactive forms used for preparing the desired iFluor® 830 conjugates as it specifically and readily reacts with thiol group such as reduced antibodies and thiol-modified oligos. iFluor® 830 dye emission is a unique color for spectrum flow cytometry as it 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 for other imaging applications that require IR detections. In vivo fluorescence imaging uses a sensitive camera to detect fluorescence emission from fluorophores in whole-body living small animals. To overcome the photon attenuation in living tissue, fluorophores with long emission at the infrared (IR) region are generally preferred. 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 are aiming to achieve high-resolution, multimodality and lifetime-based in vivo fluorescence imaging.