

Near Infrared iFluor™ Dyes for *In Vivo* Imaging

Ordering Information

Cat. #	Product Description	Unit Size
1360	iFluor™ 780 acid	1 mg
1362	iFluor™ 780 amine	1 mg
1364	iFluor™ 780 hydrazide	1 mg
1366	iFluor™ 780 maleimide	1 mg
1368	iFluor™ 780 succinimidyl ester	1 mg

Biological Applications

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 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 are aiming to achieve high-resolution, multimodality and lifetime-based *in vivo* fluorescence imaging.

Our NIR Fluor™ 780 is designed to label proteins and other biomolecules with near infrared fluorescence. Conjugates prepared with NIR Fluor™ 780 have the excitation and emission spectra similar to that of indocyanine green (ICG) and the IRDye® 800 dye, with excitation/emission maxima at 783/814 nm. NIR Fluor™ 780 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 for other imaging applications that require NIR detections such as the two-color western applications with the LI-COR® Odyssey® infrared imaging system. This carbonyl-reactive hydrazide can be conveniently used for labeling antibodies and other amino-containing biomolecules.

Storage Conditions

Store at -20°C. Expiration date is 12 months from the date of receipt.

References

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