

## Product Information Sheet

### Ordering Information

Product Number:	1362
Product Name:	iFluor™ 790 amine
Unit Size:	1 mg
Storage Conditions:	<-15 °C and kept from light and moisture
Expiration Date:	12 months upon receiving

### Chemical and Spectral Properties

Molecular Weight:	1435.42
Soluble in:	Water
Excitation Wavelength:	782 nm
Emission Wavelength:	811 nm

### Application Notes

*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 iFluor™ 790 is designed to label proteins and other biomolecules with near infrared fluorescence. Conjugates prepared with iFluor™ 790 have the excitation and emission spectra similar to that of indocyanine green (ICG) and the IRDye® 800 dye, with 783/814 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 for other imaging applications that require NIR detections such as the two-color western applications with the LI-COR® Odyssey® infrared imaging system.