

# NIR Fluorochrome Label

Caution: For Laboratory Use. A product for research purposes only.

## VivoTag<sup>®</sup> 680XL-MAL

Product Number: NEV11220

**DESCRIPTION:** *VivoTag*<sup>®</sup> 680XL-MAL is a thiol (-SH, sulfhydryl) reactive maleimide-containing NIR fluorochrome for molecular labeling applications. *VivoTag* 680XL-MAL enables optimized and integrated imaging applications in both *in vivo* and *in vitro* applications. *VivoTag* 680XL-MAL's superior brightness makes it particularly well suited for the labeling of thiol and cysteine containing molecules for a wide range of imaging applications. It is optimized for use with fluorescence tomography FMT<sup>™</sup> imaging systems with expanded wavelength capabilities to enable quantitative imaging of up to four channels and four different biomarkers of interest *in vivo*.

### MATERIAL CONTENTS:

*VivoTag* 680XL-MAL: 5 mg vial.

**PROPERTIES:** The physical characteristics of *VivoTag* 680XL-MAL can be found in **Table 1** and **Figure 1**.

### STORAGE & HANDLING:

- Upon receipt, *VivoTag* 680XL-MAL should be **IMMEDIATELY STORED AT -20 °C AND PROTECTED FROM LIGHT**.
- When stored and handled properly, *VivoTag* 680XL-MAL is stable for three months from date of shipment.
- Allow *VivoTag* 680XL-MAL to equilibrate to room temperature before using.

### IN VIVO IMAGING AND APPLICATIONS:

- Optimized *in vivo* NIR label for labeling target molecules including peptides, small molecules, macromolecules and nanoparticles.
- Highly hydrophilic and suitable for multiple dye loading.

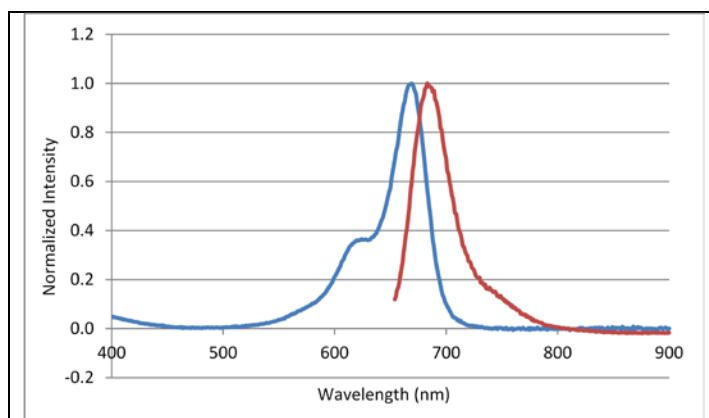
**Table 1.** *VivoTag* 680XL-MAL Characteristics

Property	Specification
MW (Penta TEA salt)	1881 g mol <sup>-1</sup>
Absorbance max <sup>1</sup>	669 ± 3 nm
Emission max <sup>1</sup>	688 ± 5 nm
Extinction (ε)	~210,000 M <sup>-1</sup> cm <sup>-1</sup>
Purity <sup>2</sup>	>90%
Appearance	Blue solid

1. Absorbance and fluorescence maxima determined in 1x PBS.

2. As determined by RP-HPLC and measuring absorbance at 670 nm.

**Figure 1.** Absorbance and fluorescence emission spectra of *VivoTag* 680XL-MAL in 1x PBS.



## NOTES:

- *PerkinElmer's VivoTag 680 XL-MAL* is intended for research purposes only and is not for human use. It must be used by or directly under the supervision of a technically qualified individual experienced in handling potentially hazardous materials. Please read the Material Safety Data Sheet (MSDS) provided for this product.
- Several of *PerkinElmer's* products and product applications are covered by U.S and foreign patents and patents pending. Our products are not available for resale or other commercial uses without a specific agreement from *PerkinElmer*.

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