

# NIR Fluorochrome Label

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

## VivoTag-S<sup>®</sup> 680

Product Number: NEV10121

**DESCRIPTION:** *VivoTag-S<sup>®</sup> 680* is an amine reactive near-infrared (NIR) fluorochrome (NHS ester) for labeling biomolecules for *in vivo* imaging applications.

### MATERIAL

**CONTENTS:** *VivoTag-S 680*: Available in 1 mg or 5 mg vials.

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

### STORAGE & HANDLING:

- Upon receipt, *VivoTag-S 680* should be **IMMEDIATELY STORED AT -20 °C AND PROTECTED FROM LIGHT**.
- When stored and handled properly, *VivoTag-S 680* is stable for up to twenty four months.
- Allow *VivoTag-S 680* 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.
- Labeling of target molecules that have multiple amine reactive sites with > 1 fluorochrome results in a blue shift in the absorbance spectra as shown in **Fig. 1**.

**Table 1.** *VivoTag-S 680* Characteristics

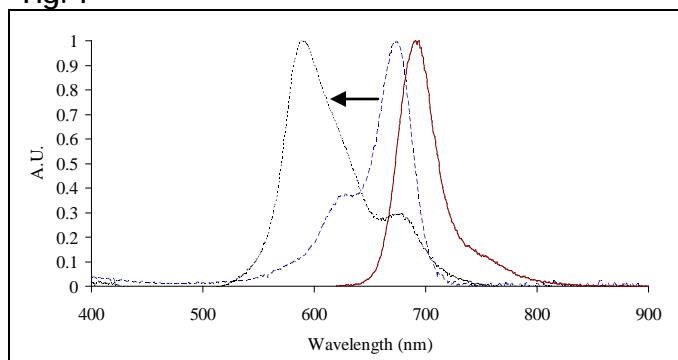
Property	Specification
MW	1439 g mol <sup>-1</sup>
Fluorescence <sup>1</sup>	<ul style="list-style-type: none"> <li>• Excitation 673 ± 5 nm</li> <li>• Emission 691 ± 5 nm</li> </ul>
Absorbance <sup>1</sup>	673 ± 5 nm
Extinction	~230,000 M <sup>-1</sup> cm <sup>-1</sup>
Purity <sup>2</sup>	>90 %
Appearance	Blue Solid

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

2. Reactive ester as determined by RP-HPLC and measuring absorbance at 675 nm.

\* MW as Tris TEA salt

**Fig. 1**



Absorbance and fluorescence emission spectra of *VivoTag-S 680* in 1x PBS. Arrow indicates shift in absorbance of conjugate with multiple fluorochromes.

## NOTES:

- *PerkinElmer's VivoTag-S 680* 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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