TECHNICAL DATA SHEET

# NIR Fluorochrome Label

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

## VivoTag-S<sup>®</sup> 680

## Product Number: NEV10122

**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 1and 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:

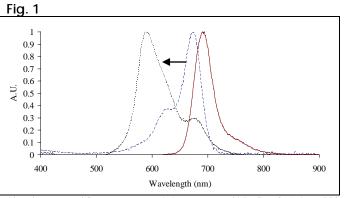
• Optimized in vivo NIR label for labeling target molecules including peptides, small molecules, macromolecules and nanoparticles.

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

Property	Specification
MW	1439 g mol <sup>-1</sup>
Fluorescence <sup>1</sup>	
<ul> <li>Excitation</li> </ul>	673 ± 5 nm
<ul> <li>Emission</li> </ul>	691 ± 5 nm
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 flueroscence maxima determined in 1x PPS	

 Absorbance and fluorescence maxima determined in 1x PBS.
 Reactive ester as determined by RP-HPLC and measuring absorbance at 675 nm.

\* MW as Tris TEA salt



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

• 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**.

## **NOTES:**

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- *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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