Fluorescent Imaging Agent

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

# IntegriSense<sup>TM</sup> 680

### Product Number: NEV10645

**DESCRIPTION:** IntegriSense<sup>TM</sup> 680 is a targeted fluorescence imaging agent comprising a potent, selective non-peptide small molecule integrin  $\alpha_v\beta_3$  antagonist and an NIR fluorochrome. This agent has been developed to enable *in vivo* visualization and quantification of integrin  $\alpha_v\beta_3$  expression in neovasculature as well as in tumor cells, to monitor tumor angiogenesis, growth and treatment efficacy. Half-life in tissue of IntegriSense 680 signal is >21 days.

#### **MATERIAL** (Needs to be reconstituted)

TECHNICAL

DATA SHEET

**CONTENTS:** Each vial contains 24 nmol of *IntegriSense* 680 lyophilized solid. The *IntegriSense* 680 solution has been filtered through a 0.2  $\mu$ m filter prior to lyophilization. Reconstitute *IntegriSense* 680 with 1.2 mL of 1 x PBS before injecting into animals. The packaged material provides sufficient reagent for imaging approximately 10 mice (weighing ~25 grams each) when using the recommended dose of 2 nmol (100  $\mu$ L) of *IntegriSense* 680 per mouse.

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

#### **STORAGE & HANDLING:**

- Upon receipt, *IntegriSense 680* should be IMMEDIATELY STORED AT 2-8 °C AND PROTECTED FROM LIGHT.
- When stored and handled properly, *IntegriSense* 680 is stable for up to twelve months in the lyophilized form.
- Before opening the vial check to ensure that the lyophilized powder is present at the bottom of the vial.
- After reconstituting with PBS, gently swirl the solution to ensure that the lyophilized powder is fully in solution.

#### Table 1. IntegriSense 680 Characteristics

Property	Specification
MW	1432 g mol <sup>-1</sup>
Fluorescence <sup>1</sup>	
<ul> <li>Excitation</li> </ul>	675 nm
<ul> <li>Emission</li> </ul>	693 nm
Absorbance	675 ± 5 nm
Purity <sup>2</sup>	>95 %
Appearance	Dark blue solid

Absorbance and fluorescence maxima of *IntegriSense* 680 in 1x PBS.
 As determined by RP-HPLC and measuring absorbance at 675 nm.

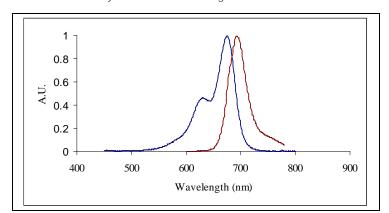


Figure 1. Absorbance and fluorescence emission spectra of IntegriSense 680 in 1x PBS.

• Once reconstituted with 1 x PBS, the solution is stable up to 10 days when stored at 2-8 °C and protected from light.

## IN VIVO IMAGING AND APPLICATIONS:

- The generally recommended procedure for *in vivo* imaging with *IntegriSense 680* is administration via intravenous injection and imaging **3 48 hours post injection**.
- Imaging at earlier time points (~3 hrs) is recommended when imaging the vasculature
- Imaging at later time points (24-48 hrs) is recommended when imaging tumors to reduce background.
- *IntegriSense* 680 enables imaging of neovasculature and tumors in a range of oncology applications.

## **NOTES:**

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- *PerkinElmer's IntegriSense 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.
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