TECHNICAL DATA SHEET

# Fluorescent Imaging Agent

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

## ProSense® 680

**Product Number: NEV10003**

**DESCRIPTION:** *ProSense® 680* is a protease activatable fluorescent *in vivo* imaging agent that is activated by key disease associated proteases such as Cathepsin B, L, S and Plasmin. *ProSense 680* is optically silent in its unactivated state and becomes highly fluorescent following protease-mediated activation.

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

**CONTENTS:** Each vial contains 20 nmol of *ProSense 680* at a concentration of 20 nmol/150 µL, in 1xPBS. The *ProSense 680* solution has been filtered through a 0.2 µm filter.
Upon dilution with 1350 ul of 1 x PBS, this material provides sufficient reagents for imaging approximately 10 mice (weighing ~25 grams each) when using the recommended dose of 2 nmol/150 µL 1xPBS of *ProSense 680* per mouse.

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

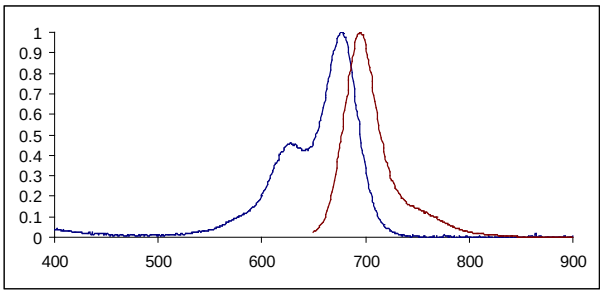
**STORAGE & HANDLING:**

- Upon receipt, *ProSense 680*should be **IMMEDIATELY STORED AT 2-8 °C AND PROTECTED FROM LIGHT.**
- When stored and handled properly, *ProSense 680* is stable for up to twelve months.
- Allow *ProSense 680* imaging agent to equilibrate to room temperature before injecting into animals.

| Property | Specification |
|---|---|
| MW | ~400,000 g mol$^{-1}$ |
| Fluorescence[1] | |
| • Excitation | 680 ±10 nm |
| • Emission | 700 ±10 nm |
| Absorbance[1] | 680 ±10 nm |
| Purity[2] | >95% |
| Appearance | Clear blue solution |

- **IN VIVO IMAGING & APPLICATIONS:**
  - The recommended procedure for *in vivo* imaging with *ProSense 680* is administration via tail vein injection and imaging **24 hours post tail vein injection.**
  - **Imaging in Arthritis**: *ProSense 680* can be used as a marker for disease progression and therapeutic response in animal models of arthritis.
  - **Imaging in Oncology**: *ProSense 680* can be used as a marker for disease progression in animal tumor model

**Fig 1.**




Absorbance and fluorescence emission spectra in 1x PBS.

## SELECTED REFERENCES:


- Weissleder, R., Tung, C.H., Mahmood, U., Bogdanov, A. In vivo imaging of tumors with protease-activated near-infrared fluorescent probes. *Nature Biotechnology* **17**, 375-378 (1999)


## NOTES:

- *PerkinElmer's ProSense 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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