# Fluorescent Imaging Agent

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

## AngioSPARK® 750

**Product Number: NEV10150** 

**DESCRIPTION:** NanoSPARKS<sup>TM</sup> are a new family of highly fluorescent near infrared nanoparticles specifically designed for *in vivo* imaging. NanoSPARKS contain an iron oxide core that is coated to specifically produce a functionalized biocompatible product. AngioSPARK<sup>®</sup> 750 comprises pegylated fluorescent nanoparticles that remain localized in the vasculature for extended periods of time and enable imaging of blood vessels and angiogenesis.

MATERIAL (Ready to use: No dilution required)

**CONTENTS:** Each vial contains 500  $\mu$ L of *AngioSPARK 750* in 1xPBS. The *AngioSPARK 750* solution has been filtered through a 0.2  $\mu$ m filter.

This material provides sufficient reagent for imaging approximately 5 mice (weighing ~25 grams each) when using the recommended injection volume of 100  $\mu$ L of *AngioSPARK 750* per mouse.

**PROPERTIES:** The physical characteristics of *AngioSPARK 750* can be found in **Table 1 and Figure 1.** 

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

- Upon receipt, AngioSPARK 750 should be IMMEDIATELY STORED AT 2-8 °C AND PROTECTED FROM LIGHT. DO NOT FREEZE.
- When stored and handled properly, *AngioSPARK 750* is stable for up to 12 months.
- Allow *AngioSPARK 750* to equilibrate to room temperature before use.

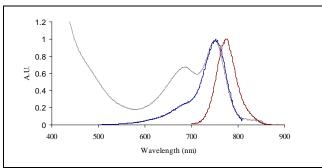
### IN VIVO IMAGING APPLICATION:

- The recommended procedure for analysis by intravital microscopy imaging using *AngioSPARK 750* is administration via tail vein injection and imaging 0 4 hour post injection.
- AngioSPARK 750 can also be used at later time points (>12 hours) to image vascular leak in tissue site of inflammation and cancer. AngioSPARK 750 can be imaged within the interstitium for up to 24 hours post tail vein injection.

 Table 1. AngioSPARK 750 Characteristics

| Property                     | Specification                 |
|------------------------------|-------------------------------|
| Particle Size                | 20-50nm                       |
| Fluorescence <sup>1</sup>    |                               |
| <ul><li>Excitation</li></ul> | 750 ± 5 nm                    |
| <ul><li>Emission</li></ul>   | 775 ± 5 nm                    |
| Extinction <sup>1</sup>      | 4 X 10 6 ± 2 X 106 M-         |
|                              | <sup>1</sup> cm <sup>-1</sup> |
| Appearance                   | Greenish-brown                |
|                              | solution                      |

Absorbance and fluorescence maxima of AngioSPARK 750 in 1x
 PRS



**Figure 1**. Absorbance, excitation and fluorescence emission spectra of *AngioSPARK 750* in 1x PBS.

#### **NOTES:**

- *PerkinElmer's* NanoSPARK's products are intended for research purposes only and are 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*.

