TECHNICAL DATA SHEET

Fluorescent Imaging Agent

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

AngioSPARK[®] 680

Product Number: NEV10149

DESCRIPTION: NanoSPARKSTM 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*[®] 680 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 µL of *AngioSPARK 680* in 1xPBS. The *AngioSPARK 680* solution has been filtered through a 0.2 µm filter.

This material provides sufficient reagent for imaging approximately 5 mice (weighing ~25 grams each) when using the recommended injection volume of 100 μ L of *AngioSPARK 680* per mouse.

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

STORAGE & HANDLING:

- Upon receipt, AngioSPARK 680 should be IMMEDIATELY STORED AT
 2-8 °C AND PROTECTED FROM LIGHT. DO NOT FREEZE.
- When stored and handled properly, *AngioSPARK 680* is stable for up to 12 months.
- Allow *AngioSPARK 680* to equilibrate to room temperature before use.

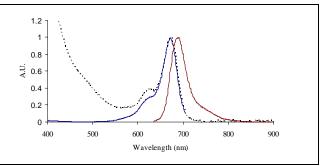
IN VIVO IMAGING APPLICATION:

- The recommended procedure for analysis by intravital microscopy imaging using *AngioSPARK 680* is administration via tail vein injection and imaging 0 – 4 hour post injection.
- AngioSPARK 680 can also be used at later time points (>12 hours) to image vascular leak in tissue site of inflammation and cancer. AngioSPARK 680 can be imaged within the interstitium for up to 24 hours post tail vein injection.

Table 1. AngioSPARK 680 Characteristics

Property	Specification
Particle Size	20-50nm
Fluorescence ¹	
 Excitation 	673 ± 5 nm
 Emission 	690 ± 5 nm
Extinction ¹	4 X 10 ⁶ ± 2 X 10 ⁶ M ⁻
	¹ CM ⁻¹
Appearance	Greenish-brown
	solution

1. Absorbance and fluorescence maxima of AngioSPARK 680 in 1x PBS



Absorbance, excitation and fluorescence emission spectra of AngioSPARK 680 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*.

PerkinElmer, Inc. 549 Albany Street Boston, MA 02118 USA P: (800) 762-4000 or (+1) 203-925-4602 www.perkinelmer.com/nenradiochemicals **For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs** Copyright ©2010, PerkinElmer, Inc. All rights reserved. PerkinElmer[®] is a registered trademark of PerkinElmer, Inc. All other trademarks are the property of their respective owners.

