# IVISense<sup>™</sup> Cat K 680 FAST Fluorescent Probe

Product Number: NEV11000

#### DESCRIPTION

IVISense<sup>III</sup></sup> Cat K 680 FAST Fluorescent Probe is a member of a family of activatable fluorescent imaging agents comprising a novel architecture, termed F.A.S.T. (<u>Fluorescent Activatable Sensor Technology</u>), that confers an improved pharmacokinetic profile with earlier imaging time points. This architecture offers higher target specific signal with reduced background while also reducing the</sup>

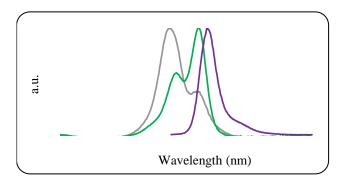
optimal imaging time after injection.

IVISense<sup>™</sup> Cat K 680 FAST Fluorescent Probe is a Cathepsin K (Cat K) activatable agent that is optically silent upon injection and produces fluorescent signal after cleavage by disease related Cathepsin K. Cat K is highly expressed in osteoclasts, suggesting a specialized role in bone resorption. Cat K is found extracellularly along the bone and cartilage and intracellularly in lysozomes of osteoclasts attached to the bone. In addition to expression by osteoclasts, Cat K is also expressed by a broad range of other cell types including ovarian cells, colonic tissue, alveolar and bronchial epithelial cells, synovial fibroblasts, breast cancer cells, macrophages.

Property	Specification
MW	8500 g mol <sup>-1</sup>
Fluorescence <sup>1</sup>	
<ul> <li>Excitation</li> </ul>	675 nm
Emission	693 nm
Absorbance <sup>1</sup>	675 nm (activated)
Purity <sup>2</sup>	>95%
Appearance	Dark Blue Solid

1. Absorbance and fluorescence in 1xPBS.

2. As determined by RP-HPLC, measuring absorbance at 675nm



#### MATERIAL

Each vial contains 24 nmol of IVISense™ Cat K 680 FAST Fluorescent Probe in dry solid form. IVISense™ Cat K 680

FAST Fluorescent Probe has been filtered through a 0.2 µm filter prior to drying.

Reconstitute IVISense<sup>™</sup> Cat K 680 FAST Fluorescent Probe 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 µL) of IVISense<sup>™</sup> Cat K 680 FAST Fluorescent Probe per mouse.

## STORAGE & HANDLING

- Upon receipt, IVISense<sup>™</sup> Cat K 680 FAST Fluorescent Probe should be IMMEDIATELY STORED AT 2-8 °C AND PROTECTED FROM LIGHT.
- When stored and handled properly, IVISense™ Cat K 680 FAST Fluorescent Probe is stable for up to twelve months in dry solid form.
- Before opening the vial, check to ensure that all of the solid material is at the bottom of the vial.
- Once reconstituted, the solution is stable up to 14 days when stored at 2-8°C and protected from light.

### IN VIVO IMAGING & APPLICATIONS

- The recommended procedure for in vivo imaging with IVISense<sup>™</sup> CAT K 680 FAST Fluorescent Probe is administration via intravenous injection and imaging 6 hours post injection.
- IVISense<sup>™</sup> Cat K 680 FAST Fluorescent Probe enables imaging of Cathepsin K activity in Oncology applications involving metastasis to the bone as well as a broad range of bone applications including osteoporosis and bone changes following arthritis

The information provided in this document is for reference purposes only and may not be all-inclusive. Revvity, Inc., its subsidiaries, and/or affiliates (collectively, "Revvity") do not assume liability for the accuracy or completeness of the information contained herein. Users should exercise caution when handling materials as they may present unknown hazards. Revvity shall not be liable for any damages or losses resulting from handling or contact with the product, as Revvity cannot control actual methods, volumes, or conditions of use. Users are responsible for ensuring the product's suitability for their specific application. REVVITY EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR PITNESS FOR A PARTICULAR PURPOSE, REGARDLESS OF WHETHER ORAL OR WRITTEN, EXPRESS, OR IMPLIED, ALLEGEDLY ARISING FROM ANY USAGE OF ANY TRADE OR ANY COURSE OF DEALING, IN CONNECTION WITH THE USE OF INFORMATION CONTAINED HEREIN OR THE PRODUCT ITSELF NEW YOR OF A REVIDENCE.



(800) 762-4000 www.revvity.com

For a complete listing of our global offices, visit <u>www.revvity.com</u> Copyright ©2023, Revvity, Inc. All rights reserved.