

# Product Data Sheet

**Date of Issue: 26 Nov 2019**

## 1. Product Information

- Product Name : NpFlamma® MMP-2,9 749
- Catalog Number : PNM0105
- Packing Unit : 10 tests / 50 tests / 100 tests
- Appearance : Green Liquid
- Storage Conditions : Protect from Light at 4 °C

## 2. Additional Information

- Fluorophore Label : Flamma® Fluors 749
- Excitation<sub>Max</sub> : 750 nm
- Emission<sub>Max</sub> : 778 nm

## 3. Description

NpFlamma® MMP-2,9 749 is a NIR dye-incorporated MMP-activatable chitosan nanoparticle (CNP) that enables to selectively detect tumor cells. The probe comprises Flamma® Fluor 749 dye that connected to a quencher through a MMP-2,9 cleavable peptide, and the peptide is chemically conjugated to CNP. Flamma® Fluor dyes display strong absorption, high fluorescence quantum yield and high photostability, and they maintain good fluorescence activity and stability after conjugated to biomolecules. The maxima of Ex/Em values are at 760/778 nm. BioActs offers NpFlamma® MMP-2,9 749 as a smart fluorescent probe for monitoring MMP-related diseases such as cancer progression, invasion and metastasis, rheumatoid arthritis, pulmonary diseases and areas of cardiovascular disease, and also for evaluating the potential therapeutic efficacy of drugs targeting for these diseases.