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### **TECHNICAL DATA SHEET**

# Pyrene-PEG-Nitrilotriacetic acid, Pyrene-PEG-NTA, MW 1000, 2000, 3400, 5000, 10k, 20k

Cat# PG2-NTPN-1k, 2k, 3k, 5k, 10k, 20k

Pyrene PEG NTA is one of Nanocs' fluorescent metal chelators that can bind to nickel, copper, iron and many other metal ions. Pyrene is a unique fluorescent dye that has exceptionally long excite-state lifetimes (>100 nanoseconds). The long excited-state life time of this dye makes it useful for time-resolved fluorescent immunoassays, probing oxygen in cells and lipid vesicles. NTA is a commonly used metal chelator that has been used for His-tag protein purification for many years. Pyrene labeled NTA thus can be used for fluorescent assay development and cellular structural study. PEG linker between Pyrene and NTA offers better water solubility, less steric hindrance and enhanced stability. Compared to other common fluorescent dyes, Nanocs' reactive fluorescent PEG dyes are brighter, more stable and easier to use. All our reactive fluorescent PEG dyes can be used directly in aqueous buffer without need adding any organic solvents.

## **Product Structure:**

$$\begin{array}{c} H \\ N-CH_2CH_2-(OCH_2CH_2)n \\ O \end{array} \begin{array}{c} H \\ N \\ COOH \end{array}$$

# **Product Specifications:**

Molecular composition: Pyrene PEG Nitriloacetic acid

Appearance (form): Solid or semi-Solid depends on molecular weight of PEG

Appearance (color): Off-white to pale yellow

Ex/Em wavelength: 339/384 nm

Solubility: 10 mg/mL, clear in DMSO, water and chloroform

## **Storage Conditions:**

**Pyrene PEG NTA** should be stored at <4 °C. Protect from light.

#### This product is for research use only.

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