

#### **TECHNICAL DATA SHEET**

# Desthiobiotin PEG Maleimide, MW 1000, 2000, 3400, 5000, 10k, 20k

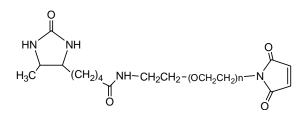
Catalog Numbers: PG2-DSBML-1k, 2k, 3k, 5k, 10k, 20k.

Synonym: Maleimide PEG Desthiobiotin

## **Description:**

Desthiobiotin PEG Maleimide (DSB-PEG-Mal) is one of Nanocs' reactive desthiobiotin PEG crosslinkers that can react with sulfhydryl (thiol) group. Desthiobiotin is a modified version of biotin. Compared to biotin, desthiobiotin binds to streptavidin, avidin and other biotin-binding proteins with high specificity but it can be eluted under mild conditions (i.e., by competitive displacement with regular, free biotin). As such, this reagent is a useful alternative to Biotin for avidin-biotin techniques in which nondenaturing elution of the labeled proteins is desired. Maleimide group in this molecule reacts specifically and efficiently with thiol groups (-SH) in neutral pH buffer (pH 6.5-7.5). Reaction between maleimide and thiol allows easy conjugation of desthiobiotin tag to proteins, antibodies and other biomolecules quickly and efficiently. PEG linker between desthiobiotin and maleimide offers better water solubility, flexible linker length and enhanced stability.

## **Product Structure:**



#### Product Specifications:

- Composition: Desthiotin PEG Maleimide.
- Appearance: White/off-white solid, semi-solid depends on molecular weight.
- Solubility: 10 mg/mL, clear in water, DMSO.
- Function group: Desthiobiotin
- Reactive group: Maleimide.

## Handling and Use:

**Desthiotin PEG Maleimide** is sensitive to moisture and temperature. For best use, material should always be kept in low temperature in dry condition. Prepare fresh solution right before use. Avoid frequent thaw and freezing. For more information about using this product, visit www.nanocs.net.

### Storage Conditions:

**Maleimide PEG Desthiotin** should be stored at -20 <sup>o</sup>C. Desiccate. Protect from light. Materials may be handled under inert gas for best stability. Re-test material 12 months after receiving.

This product is for research use only and is not intended for use in humans or for diagnostic use.

#### **Related Products:**

Desthiobiotin PEG NHS	Desthiobiotin PEG Azide
Desthiobiotin PEG amine	Desthiobiotin PEG Thiol
Desthiobiotin PEG DBCO	

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