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#### **TECHNICAL DATA SHEET**

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

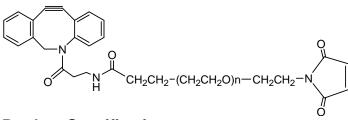
Catalog Numbers: PG2-DBML-1k, 2k, 3k, 5k, 10k, 20k.

Synonym: Maleimide PEG DBCO

### **Description:**

DBCO PEG Maleimide is one of Nanocs' thiol reactive DBCO PEG crosslinkers that can go Click Chemistry reaction without a need of any metal catalysts. This reagent enables crosslinking of thiol and azide bearing molecules quickly and efficiently. (dibenzocyclooctyne) is a cyclooctyne with excellent reactivity toward azide group. The strain-promoted 1,3dipolar cycloaddition of cyclooctynes and azides, also termed as the Cu-free click reaction, is a bioorthogonal reaction that enables the conjugation of two molecules in aqueous solution. DBCO PEG Maleimide possesses fast kinetics and good stability in aqueous buffer. Maleimide group reacts with free thiol groups at pH 6.5~7.5 to form a stable thiol-ether bond. Reaction between maleimide and thiol allows the conjugation of DBCO PEG to various molecules or particles with high efficiency. Resulted DBCO group can be used further for azide reaction.

# **Product Structure:**



#### **Product Specifications:**

Composition: DBCO PEG Maleimide.

Appearance: White/off-white solid, semi-solid

depends on molecular weight.

Solubility: 10 mg/mL, clear in water,

chloroform, DMSO.

Reactive groups: DBCO and Maleimide.

Reactive to: Azide and thiol.

## Handling and Use:

**DBCO 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 DBCO** should be stored at -20 °C. Desiccate. Materials may be handled under inert gas for best stability. Re-test material after 6 months.

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

#### **Related Products:**

DBCO PEG NHSDBCO PEG COOHDBCO PEG NH2DBCO PEG ThiolDBCO PEG BiotinDBCO PEGDBCO PEG Folate

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