Tel: 1(800)388-4221 Fax: 1(917)591-2212 Email: info@nanocs.com

TECHNICAL DATA SHEET

DBCO PEG Silane, MW 2000, 3400, 5000, 10k, 20k

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

Synonym: Silane PEG DBCO, DABCO PEG Silane

Description:

DBCO PEG Silane is one of Nanocs' surface reactive silane PEG derivatives that can go Click Chemistry reaction without a need of any metal catalysts. DBCO (dibenzocyclooctyne) is a cyclooctyne which has excellent reactivity toward azido (-N₃) group. The strainpromoted 1,3-dipolar 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 derivatives possess fast kinetics and good stability in aqueous buffer. Alkoxyl silane groups, on the other hand, hydrolyze readily in aqueous solution and they can react with OH groups in 30~60 min in room temperature. Reaction between alkoxysilane and hydroxy group allows attachment of DBCO PEG to various surfaces with high efficiency. Silane functional PEGs are useful reagents to modify silica particles, glass surface, or PDMS silanes.

Product Structure:

Product Specifications:

Reactive to:

Composition: DBCO PEG Silane.

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

Azide, OH.

Solubility: 10 mg/mL, clear in water,

ethanol, chloroform, DMSO.

Reactive groups: DBCO, silane.

Handling and Use:

DBCO PEG Silane 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:

Silane PEG DBCO should be stored at -20 $^{\circ}$ C. Desiccate. Protect from light. Materials may be handled under inert gas for best stability. Re-test material after 3 months.

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

Related Products:

DBCO PEG NH2

DBCO PEG NHS

DBCO PEG NHS

DBCO PEG FITC

DBCO PEG DSPE

DBCO PEG Biotin

To Order:

Order online: www.nanocs.net

Order by Email: sales@nanocs.com

Order by phone: 1(800) 388-4221; 1(888)

908-8803

For more information, visit www.nanocs.net

The information given in this document is to the best of our knowledge accurate, but no warranty is expressed or implied. It is the user's responsibility to determine the suitability for their own use of the products described herein, and since conditions of use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as a recommendation to use any product or to practice any process in violation of any law or any government regulation.