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Product Information Sheet

Ordering Information

Product Number:	4530
Product Name:	DBCO-PEG4-NHS Ester
Unit Size:	1 mg
Storage Conditions:	Freeze (<-15 °C), Minimize light exposure
Expiration Date:	12 months upon receiving

Chemical and Spectral Properties

Appearance:	Solid
Molecular Weight:	649.70
Soluble In:	DMSO
Excitation Wavelength:	N/A
Emission Wavelength:	N/A

Application Notes

Cu-free click reaction, i.e., the strain-promoted alkyne-azide cycloaddition (SPAAC) is a bioorthogonal reaction utilizing a pair of reagents, cyclooctynes and azides that exclusively and efficiently react with each other while remain inert to naturally occurring functional groups such as hydroxy, amino and thiol groups. SPAAC enables labeling a wide variety of biomolecules without any auxiliary reagents in an aqueous and otherwise complex chemical environment through the formation of a stable triazole. Among the large number of known cyclooctynes, dibenzocyclooctyne (DBCO) compounds comprise a class of reagents that possesses reasonably fast kinetics and good stability in aqueous buffers. Within physiological temperature and pH ranges, the DBCO group will not react with thiol, amino or hydroxy groups that are naturally present in many biomolecules. DBCO-PEG4-NHS Ester is one of the most common reagents used for introducing DBCO group into a biomolecule via the modification of the amino groups.