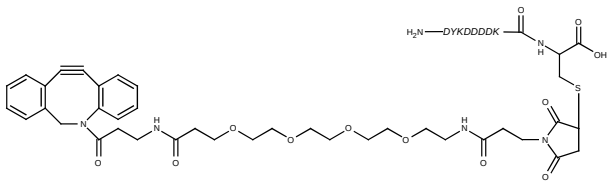
DATA SHEET

Jena Bioscience

DBCO-PEG$_4$-FLAG

Dibenzylcyclooctyne-PEG$_4$-FLAGtag (DYKDDDDK)

Cat. No.	Amount
CLK-033-S	0,5 µmol
CLK-033-L	5 x 0,5 µmol



Structural formula of DBCO-PEG$_4$-FLAG

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery

Molecular Formula: $C_{80}H_{107}N_{15}O_{30}S$

Molecular Weight: 1790.85 g/mol

Exact Mass: 1789.70 g/mol

Purity: ≥ 95 % (HPLC)

Form: solid

Color: white to off-white

Solubility: water, PBS (up to 30 mM tested)

Spectroscopic Properties: λ_{max} 308 nm, ε 13.8.0 L mmol^{-1} cm^{-1}

Description:
DBCO-PEG4-FLAG enables the FLAG-tag (DYKDDDDK) attachment to any Azide-functionalized molecule via Cu(I)-free strain-promoted Alkyne-Azide Click Chemistry (SPAAC). The resulting FLAG-tagged molecules can subsequently be detected by an anti-FLAG antibody that is either immobilized onto a matrix (for purification) or coupled with a fluorescent dye or reporter enzyme for direct or indirect detection, respectively. Molecule solubility and efficient FLAG-tag detection is ensured by the integrated PEG-linker.

DBCO-FLAG (without PEG-linker) has been successfully used for the detection of cell-surface Azides (final concentration: 100 µM)[1] or labeling of Azide-functionalized micelles (amount: 100 nmol)[2]. These concentrations may serve as a starting point for individual assay set-up.

Related Products:
Azide-PEG$_3$-FLAG, #CLK-032

Selected References:
[1] Patterson *et al.* (2014) Improved cyclopropene reporters for probing protein glycosylation. *Molecular BioSystems* **10**:1693.

[2] Chan *et al.* (2013) Double Click: Dual Functionalized Polymeric Micelles with Antibodies and Peptides. *Bioconjugate Chemistry* **24**:105.