SUITE 201, 17 Ramsey Road, Shirley, NY 11967, USA
Tel: 1-631-637-6119 | Email: info@bioglyco.com

Product Information

NHS/Maleimide PEG reagent, Mal-PEG1-NHS ester, Purity 98%

Cat. No.: X24-09-YYX184

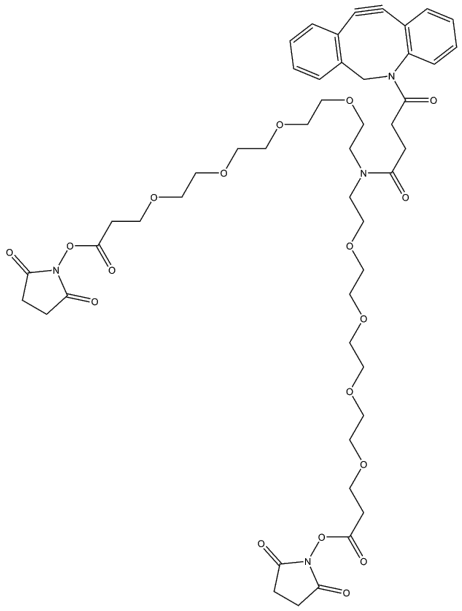
Size: 100 mg; 250 mg; 1 g; 5 g

CAS Number: 1807518-72-4

PubChem CID: 59992617

Synonym: 1807518-72-4; Mal-PEG1-NHS ester; 2,5-Dioxopyrrolidin-1-yl 3-(2-(2,5-dioxo-2,5-dihydro-1*H*-pyrrol-1-yl)ethoxy)propanoate; Mal-PEG1-SPA; 2,5-dioxopyrrolidin-1-yl 3-[2-(2,5-dioxo-2,5-dihydro-1*H*-pyrrol-1-yl)ethoxy]propanoate

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



Product Information

Description	Mal-PEG1-NHS ester acts as a PEG linker characterized by its maleimide functionality alongside an NHS ester moiety. The presence of its hydrophilic PEG spacer enhances solubility in aqueous solutions as well. This NHS ester enables labeling of primary amines *t*-located within proteins or other related substances containing amino groups while allowing the maleimide component to react with thiol groups forming covalent bonds that facilitate connections between biomolecules with thiols.
Molecular Weight	310.3
Molecular Formula	$C_{13}H_{14}N_2O_7$
Functional Group 1	NHS
Functional Group 2	Ester
Functional Group 3	Maleimide
Reactive Group 1	Thiol
Reactive Group 2	Amine
IUPAC Name	(2,5-Dioxopyrrolidin-1-yl) 3-[2-(2,5-dioxopyrrol-1-yl)ethoxy]propanoate
InChI	InChI=1S/C13H14N2O7/c16-9-1-2-10(17)14(9)6-8-21-7-5-13(20)22-15-11(18)3-4-12(15)19/h1-2H,3-8H2
InChI Key	AMRJPIJPLBUEHO-UHFFFAOYSA-N
Canonical SMILES	C1CC(=O)N(C1=O)OC(=O)CCOCCN2C(=O)C=CC2=O
Form	Solid or viscous liquid

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Purity	98%
Solubility	DCM
Identity	Confirmed by NMR.
Applications	Maleimide functionalized PEG is used for the conjugation to thiol groups in proteins, antibodies, or peptides. It is useful in creating antibody-drug conjugates (ADCs) and for various biotechnology applications where specific coupling to thiols is required.
Storage	Store at -20°C.