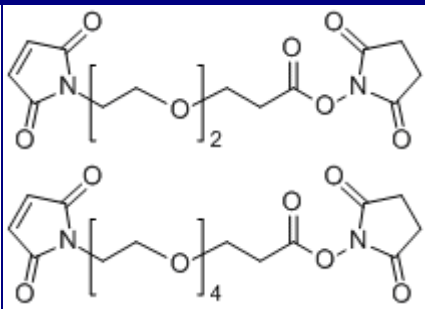
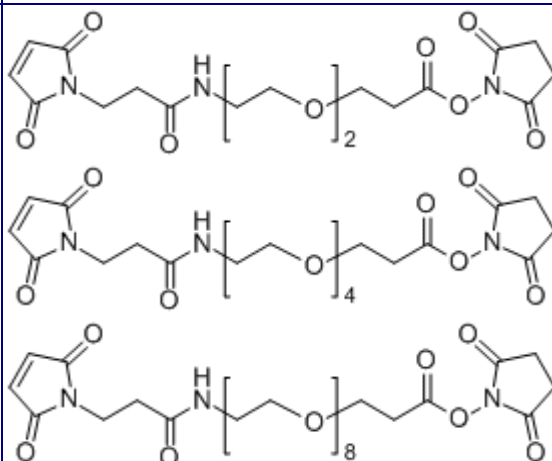
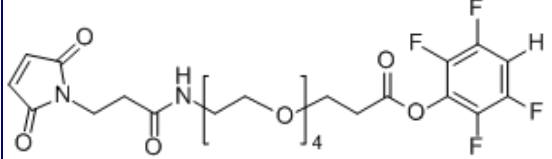
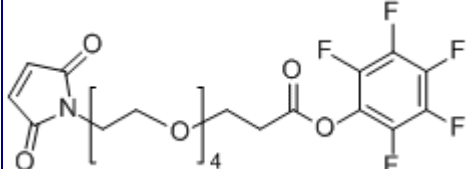


FT-B41ZK1

Maleimido – PEO – acids & NHS esters

Heterobifunctionnal PEGylated crosslinkers with amine et sulfhydryl reactivity.

Products Description

Product name cat.number	MW (g·mol ⁻¹)	Cat.Number 0-100mg 1-500m 2-1g	
Maleimide-PEO₂-NHS ester Maleimide-PEO₃-NHS ester Maleimide-PEO₄-NHS ester Maleimide-PEO₅-NHS ester Maleimide-PEO₆-NHS ester Maleimide-PEO₈-NHS ester See also Maleimide-PEOn-NHS ester # AL6581 , n=2to36 ; CAS :756525-92-5		B41ZV1 B41ZW1 B41ZX1 B41ZY1 B41ZZ1 (1-500mg)	
Maleimide-Amido-PEO₂-NHS ester Maleimide-Amido-PEO₄-NHS ester Maleimide-Amido-PEO₆-NHS ester Maleimide-Amido-PEO₈-NHS ester Syn.: Mal-NH-PEG2-CH2CH2-COO-NHS		B41ZS1 AWK6P1 B41ZT1 B41ZU1 (1-500mg)	
Maleimide-Amido-PEO₂-PFP ester Maleimide-Amido-PEO₄-PFP ester Maleimide-Amido-PEO₈-PFP ester Syn.: Maleimide-Amido-PEG ₂ -CH ₂ CH ₂ -COO-PFP Ester	n=2to6	B41ZR1 B41ZQ1 8X3156	
Maleimide-PEO_n-PFP ester	n=2to6	Inquire	

Store: at +4°C (L), protect from moisture.

R: 36/37/38, S: 26-36

Ther pegylated linker are synthetic products, with perfectly defined spacer length (PEOn).

These Maleimide derivatives modify sulfhydryl groups (SH) and introduce an other functional group that can be used for further coupling or labeling applications.

Contact your local distributor

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 03103 Montluçon Cedex - France
 Tél. 04 70 03 88 55 - Fax 04 70 03 82 60

P.1

Technical Information

Allow vial to warm to room temperature before opening.

- The **maleimide** group reacts very specifically with sulphhydryls at neutral pH 6.5-7.5, forming a stable thioether link. The reaction is rapid (a few minutes for cystein), but may require 1-2 hours to be completed in certain conditions (up 4H at +4°C). The competitive hydrolysis forming maleamic acid becomes noticeable when pH go up 8.0, where the reactivity with amines begins to be possible. It is stable in 0.1 M phosphate, pH 7.0, 4 °C, for 64 h ([Yoshitake 1979](#)). In usual conditions, one should start with a ratio of 10-20 moles of maleimide per mole of protein. With SH-peptides, a molar 1:1 incubation ratio allows almost 1:1 coupling.
- Available **spacers** (the arm separating the maleimide and carboxyl groups) are aryl chains in several lengths, and a hydrophilic PEO structure, all non-cleavable. Longer spacers lower steric hindrance of conjugates partners and favours interactions with other ligands. PEO spacer confer not only similar advantages but hydrophilicity to the conjugates:
Increases water solubility of crosslinker, *of conjugates or conjugates/ligands complexes
Increases stability*: reduced aggregation of conjugates
Increases biocompatibility*: non-immunogenic, non-toxic
Increases availability *: conjugate more hydrophilic and bioactive
Reduces non-specific binding on surfaces
 Perfectly defined unique structure (discrete PEG)
- See information about each functional group in the technical sheet XLfct1

Protocols can be found in the literature.

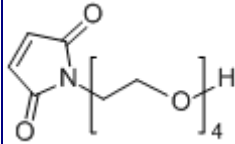
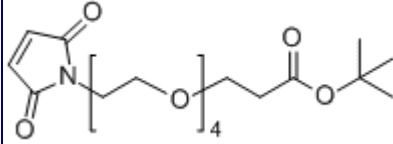
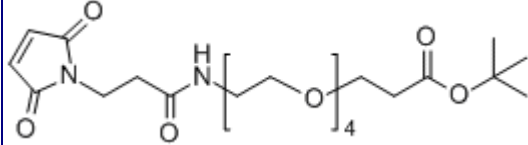
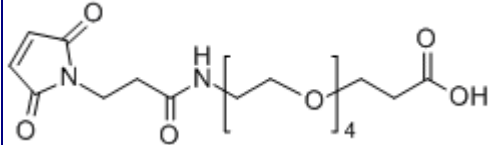
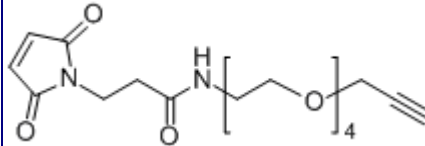
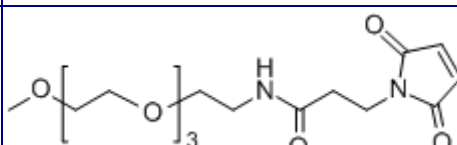
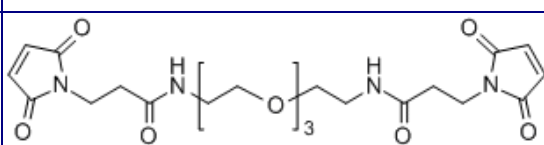
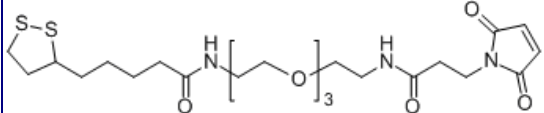
Other Information

For in vitro R&D use only

See [BioScience web page](#), and [e-search tool](#).

- [BioSciences Catalogue](#) > [Biochemistry chapter](#) > conjugation : [modifiers](#) and crosslinkers (C7, C19, C27):
 - Maleimide-PEO_x-Amine #[FK3521](#)
 - Maleimide-PEG_x-COOH #[WU0760](#)
 - Maleimido – PEO – acids & NHS esters #[B41ZK1](#)
 - Maleimido-PEOn-Acids #[AZ4170](#)
 - 2-Maleimidoethyl amine #[BI1191](#)
 - Maleimido-C6-NHS #AYI0C0
 - Maleimido-Propionic NHS ester #[49608A](#) (BMPS, GMBS, MBS)
 - Carbodiimides FT-[52005A](#): EDAC #520059, DCC (N,N'-dicyclohexylcarbodiimide) #HG9911
 - DTT #[054721](#)
 - SATA #84235A, Iminoethiolane #[42425A](#)
 - SMCC-hydrazide #[BI1281](#)
 - Hydrazone chemistry: Conjugation kit #[BL1501](#) and crosslinkers (SANH #[BL9270](#), MHPH #[BL9401](#))
- Other crosslinkers
 - Homobifunctional crosslinkers: NHS-NHS reagents, i.e. NHS-PEO-NHS and SMCC #[54940A](#)
 - Homobifunctional crosslinkers: MAL-MAL reagents, i.e. MAL-PEO-MAL #L7736A
 - PhotoActivable (PA) crosslinkers: SH and PA reactive i.e. SCBP #BI1361,...

FT-B41ZK1

Maleimide-PEO_n-COOH (Maleimide-PEO ₃ -COOH to Maleimide-PEO ₈ -COOH)	257.2	B41ZK1	See technical sheet AZ4170f
Maleimide-PEO₂-Hydroxyl	n=2to4	Inquire	
Maleimide-PEO_n-CH₂CH₂-COO^tBu	n=2to6	Inquire	
Maleimide-Amido-PEO_n-CH₂CH₂-COO^tBu	n=2to6	Inquire	
Maleimide-Amido-PEO_n-COOH See also AZ4170	n=2to6	Inquire	
Maleimide-Amido-PEO_n-Alkyne Syn.: Propargyl-PEG4-amido-Mal See Maleimide-PEG _x -Alkyne #B36EY1	n=2to6	Inquire	
mPEO_n-Maleimide Syn.: MethylOxy-PEO _(n-1) -Maleimide	n= 2 to 48	A1LYH2 n=8 A1LYJ2 n=36 A1LYJ2 n=48	
Maleimide-Amido-PEO_n-Amido-Maleimide	n=2to6	Inquire	
Maleimide-Amido-PEO_n-Amido-Lipoic acid	n=2to6	Inquire	

Please contact Uptima – Interchim for any other information

Rev.T03E

Contact your local distributor

uptima@interchim.com