

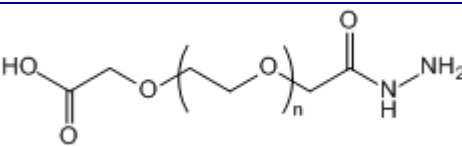
FT-B0CDF1

Hydrazido-PEG bifunctional crosslinkers

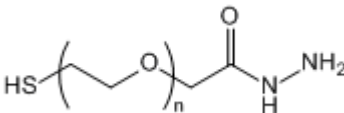
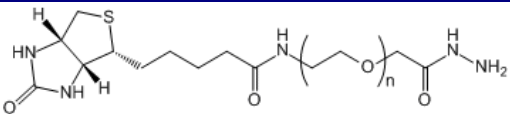
Heterobifunctional crosslinkers with a Hydrazide functional group and a PEG spacer.

Products

Hydrazide pegylated • [Crosslinkers](#) • [Lipids](#) • [Ligands and Labels](#)

Product name synonymes	Cat.number Qty 1-1g 2-5g	MW (g·mol ⁻¹)	Structure
•Crosslinkers			
Amino -PEG_x-Hydrazide Hydrazide-PEG-Amine [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire B0CD61 B0CD71 B0CD81 B0CD91	200 to 800Da. 1 000 2 000 3 400 5 000 10 000 20 000 40 000	
Carboxyl -PEG_x-Hydrazide Hydrazide-PEG-Carboxyl [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire B0DZS1 AWK1L1 B0DZT1 B0DZU1 B0DZV1	200 to 800Da. 1 000 2 000 3 400 5 000 10 000 40 000	
Azide -PEG_x-Hydrazide Hydrazide-PEG-Azide [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire B422D1 AWJL61 B0CDF1 B0DYY1 BDYZ1 B0DZ01	200 to 800Da. 1 000 2 000 3 400 5 000 10 000 20 000 40 000	
Alkyne-PEG_x-Hydrazide Hydrazide-PEG-Alkyne [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire AWJKP0 B0DZW0	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	See FT-AWJKP0 .
DBCO-PEG_x-Hydrazide Hydrazide-PEG-DBCO [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	
DBCO-PEG_x-Hydrazide Hydrazide-PEG-DBCO [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	

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PDP-PEG_x-Hydrazide Hydrazide-PEG-PDP [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire AWK1S0 AWKB10	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	
Thiol-PEG_x-Hydrazide Hydrazide-PEG-Thiol [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire AWK1T1 AWHL61	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	
Tetrazine-PEG_x-Hydrazide Hydrazide-PEG-Tetrazine [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	
			See HomoBifunctional crosslinkers (FT-WU0101) / Hydrazide-PEG-Hydrazide #WU0410 and Monofunctional linkers (FT-AYPMB0) / mPEG-Hydrazide #AYPMB.
•lipids			
Cholesterol-PEG_x-Hydrazide Hydrazide-PEG-Cholesterol [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	
DSPE-PEG_x-Hydrazide DSPE-PEG-Hydrazide [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	
•Ligands and Labels			
FITC-PEG_x-Hydrazide Hydrazide-PEG-Fluorescein [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire	200 to 800Da. 1 000 2 000 3 400 5 000 10 000 40 000	
Agarose-PEG_x-Hydrazide Hydrazide-PEG-Agarose beads [B] [N] Store at -20°C, keep in dry, avoid sunlight. ^(M)	Inquire	200 to 800Da. 1 000 2 000 3 400 5 000 10 000	See also 86624A (Agarose-Hydrazides).
Biotin-PEG_x-Hydrazide Hydrazide-PEG-Biotin [B] Store at -20°C, keep in dry, avoid sunlight. ^(L)	Inquire	2 000 3 400 5 000	 See also FT-78631A (Biotin-Hydrazides).

Storage: -20°C ^[M] (possible +4°C for short term) ; ^[J] (ship refrigerated)

Technical and Scientific Information

Polyethylene glycol (PEG) functionalized by Hydrazide reactive group and an other functional group to be used as heterobifunctional PEG crosslinker, that can be used to modify proteins, peptides and other materials.

.Features:

- Heterobifunctional PEG crosslinker
- Extended **PEG spacer** confers better hydrophilicity to the final conjugate, increasing its stability of peptides and proteins. The PEG spacer is not immunogenicity by itself. It also reduces the non-specific binding of charged molecules to the modified surfaces.

Most of the Hydrazide-PEG compounds are soluble in DMSO, H₂O -depends on MW-.

.Applications:

- Functionalization of solid surface, nanoparticles as well as biomolecules
- The **hydrazide** group give a variety of reactions:
 - . it reacts with Carbonyls (aldehydes and ketones) much faster than amine does, making them useful for site-specific crosslinking.
 - . Reaction with carboxyls better occur with activation by a carbodiimide.
 - . Reactions with amines are nonetheless useful, but require mediators (NH₄BO₄, via Schiff base formation).
- The other terminal functional group can be used for conjugation by standard chemistry.

- Poly(ethylene glycol) - PEG or poly(ethylene oxide) -, has unique characteristics toward pharmaceutical and biomedical applications: water solubility, lack of toxicity, non-immunogenicity, ready clearance, non-specific interactions with biological chemicals, and high flexibility and mobility.

Covalently chemical attachment of PEG or PEO to biologically or pharmaceutically active small molecule drug, macromolecules or particulates can impart significant pharmacological advantages over the unmodified agents, including increased water solubility, extended blood circulation lifetime. It has been successfully demonstrated in clinical uses.

- For in vitro R&D use only

Related / associated products

- [FT-C5015T](#): Azide-PEO_x-Amine (discrete PEG, synthetic)
- Useful [modifiers](#) and other conjugation technologies :
 - DCC (N,N'-dicyclohexylcarbodiimide), [HG9911](#)
 - EDAC, [520059](#)
 - DTT, [054720](#)
 - SATA #84235A, Iminothiolane [42425A](#)
 - 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 [B11361](#),...
 - SMCC-hydrazide [B11281](#)
 - Hydrazone chemistry: [Conjugation kit](#) [BL1501](#) and crosslinkers (SANH [BL9270](#), MHPH [BL9401](#))
- Desalting tools: [CelluSep dialysis tubings](#), Desalting gelfiltration columns [UP84874](#)

See [BioSciences Innovations catalogue](#) and [e-search tool](#).

Please contact Uptima – Interchim for any other information