

# Alkyne – PEG – Hydrazide

## Products Description

*Crosslinkers for click chemistry*

Product name	MW (g·mol <sup>-1</sup> )	Cat.Number	Structure example
		0-100mg 1-1g 2-5g	
<b>Alkyne-PEG<sub>x</sub>-Hydrazide</b> Syn.: Alk-PEG <sub>n</sub> -HYD			
Alkyne-PEG <sub>1K</sub> -Hydrazide	1000Da	Inquire	
Alkyne-PEG <sub>2K</sub> -Hydrazide	2000Da	AWJKP0	
Alkyne-PEG <sub>3,4K</sub> -Hydrazide	3400Da	B0DZW0	Soluble in regular aqueous solution as well as most organic solvents;
Alkyne-PEG <sub>5K</sub> -Hydrazide	5000Da	Inquire	
Alkyne-PEG <sub>10K</sub> -Hydrazide	10000Da	Inquire	
Alkyne-PEG <sub>20K</sub> -Hydrazide	20000Da	Inquire	
		(0-50mg) (1-1g) (2-5g)	
Ask also for			Alkyne-Hydrazide #1P3290 (MW:162.6 [+108.1] ) Good solubility in water, DMF, DMSO, alcohols
Alkyne-PEO <sub>n</sub> -Hydrazide (n=2-4-6-8 ; Synthetic : monodisperse PEG, discrete PEG)			

**Store:** at -20°C for long term. Possible at +4°C (L), protect from moisture.

## Technical Information

Allow vial to warm to room temperature before opening.

- Available **spacers** (the arm separating the maleimide and th other groups) are hydrophilic PEO structure, all non-cleavable. Longer spacers 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** \*: lower steric hindrance of conjugated partners favours interactions and bioactivity.  
**Reduces non-specific binding on surfaces**  
Perfectly defined unique structure (discrete PEG)
- The hydrazide group reacts to a carbonyl group of aldehydes and ketones, that is usefull to attach a terminal alkyne group. Many small natural molecules are also carbonyl compounds. Most saccharides, as well as RNAs contain 1,2-diol fragments which can be oxidized with periodate to aldehydes, which in turn react with hydrazides.
- The alkyne group can then undergo click reactions with azide.
- See information about each functional group in the technical notice XLfct.

Protocols can be found in the literature.

Contact your local distributor

[uptima@interchim.com](mailto:uptima@interchim.com)

## Other Information

For in vitro R&D use only

Other products using [BioSciences Innovations catalogue](#) and [e-search tool](#).

- Maleimide-PEO<sub>n</sub>-NHS ester #[DY6611](#)
- Heterobifunctional crosslinkers: NHS-MAL reagents, i.e. [NHS-PEO-MAL AL6581](#) and SMCC [17412A](#)
- Homobifunctional crosslinkers: NHS-NHS reagents, i.e. [NHS-PEO-NHS BH8811](#) and DSS [54940A](#)
- Homobifunctional crosslinkers: MAL-MAL reagents, i.e. [MAL-PEO-MAL L7736A](#) and BMOE [L7730A](#)
- PEO Linkers & modifiers:      MAL-COOH [AZ4170](#) and BMPA [43064A](#);  
    NHS-PEG-COOH [AN1280](#); mPEG-NHS [DZ3531](#) and others (-SH, -OH,...)
- PhotoActivable (PA) crosslinkers: SH and PA reactive i.e. SCBP #[BL1361](#),...
- Hydrazone chemistry: [Conjugation kit #BL1501](#) and crosslinkers (SANH #[BL9270](#), MHPH #[BL9401](#) SH-reactive)

Please contact Uptima – Interchim for any other information

Rev.T03E