

## **Lumiprobe Corporation**

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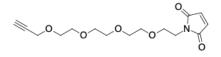
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## Alkyne-PEG4-maleimide

http://www.lumiprobe.com/p/alkyne-peg4-maleimide

When proteins or other sensitive biomolecules need to be conjugated, polyethyleneglycol (PEG) linkers are a great choice. They provide hydrophilicity and maintain separation between conjugated molecules. This linker based on PEG4, has length of 14Å (1.4 nm). Heterobifunctional linkers carrying different reactive groups can be used to prepare cross-conjugates between different molecules.

Maleimide functional group is especially useful, because they can label proteins site specifically. Most proteins have only limited number of cysteine residues that selectively react with maleimides. Alkyne group can be then conjugated with azides in a selective copper-catalyzed process, CuAAC (copper-catalyzed alkyne-azide cycloaddition).



## Structure of alkyne-PEG4-maleimide

## **General properties**

Appearance: yellow oil
Mass spec M+ increment: 311.3
Molecular weight: 311.33

CAS number: 1262681-30-0 Molecular formula:  $C_{15}H_{21}NO_6$ 

Solubility: good in water, DMF, DMSO

Quality control: NMR <sup>1</sup>H, HPLC-MS (95%)

Storage conditions: Storage: 12 months after receival at -20°C in the dark. Transportation: at room temperature for

up to 3 weeks. Avoid prolonged exposure to light. Desiccate.