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## Azide-PEG3-tetrazine

http://www.lumiprobe.com/p/azide-peg3-tetrazine

Azide-PEG3-tetrazine is a bifunctional linker for bioconjugation with azide and tetrazine function groups flanking PEG3 (triethylene glycol) spacer. The PEG spacer increases solubility in aqueous media. The azide group easily reacts with terminal alkynes, BCN, and DBCO via copper-catalyzed and copper-free click chemistry reactions. The tetrazine group reacts extremely fast with terminal alkenes and trans-cyclooctenes via inverse electron demand Diels-Alder ligation (IEDDA). Tetrazines also react with some strained cycloalkynes.

$$N_3$$
  $O$   $O$   $O$   $N_2$   $N$ 

## Structure of Azide-PEG3-tetrazine

## **General properties**

Appearance: purple oily liquid

Molecular weight: 359.39Molecular formula:  $C_{16}H_{21}N_7O_3$ 

Solubility: miscible with water, polar organic solvents

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

Storage conditions: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks.

Desiccate.