

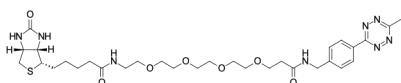
## Biotin-PEG4-tetrazine

<http://www.lumiprobe.com/p/biotin-peg4-tetrazine>

Biotin-PEG4-tetrazine is a click chemistry biotinylation tool. 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.

Biotin-labeled compounds can be linked to avidin or streptavidin for further purification or detection. The biotin group is relatively small and doesn't affect the biological activity of biotinylated proteins.

This reagent features a long PEG4-linker that separates the biotin residue from the target molecule, ensuring efficient binding to avidin or streptavidin. The linker also increases the compound's water solubility, thereby facilitating bioconjugation.



**Structure of Biotin-PEG4-Tetrazine**

### General properties

Appearance: purple powder

Molecular weight: 674.83

Molecular formula:  $C_{31}H_{46}N_8O_7S$

Solubility: good in water, DMSO, DMF

Quality control: NMR  $^1H$  and HPLC-MS (95+%)

Storage conditions: 24 months after receipt at  $-20^{\circ}C$  in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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