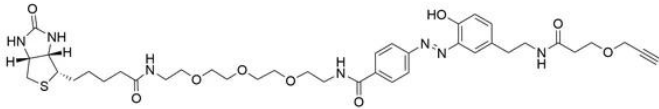




## DIAZO BIOTIN ALKYNE

**SKU:** CCT-1042



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## DESCRIPTION

Extraordinary strength of the streptavidin-biotin interaction allows for efficient capturing of even highly dilute targets; however, it makes recovery of proteins from affinity resins challenging. Conventional methods to elute biotinylated proteins from immobilized avidin include the following: (i) denaturation of streptavidin by boiling the resin in a denaturing buffer that may include high concentrations of chaotropic salts, (ii) trypsin digestion of proteins while they are bound to the resin, or (iii) elution of proteins with excess free biotin. These protocols can co-elute contaminant proteins by releasing nonspecifically bound proteins and/or naturally biotinylated proteins concurrently with labeled proteins. In addition, some of these methods can cause elution of high levels of resin-based peptides along with the proteins of interest, resulting in further sample contamination.

Diazo Biotin-Azide probes eliminate a major limitation of the streptavidin-biotin affinity purification. This reagent contains a biotin moiety linked to an azide moiety through a spacer arm containing a cleavable linker. Captured biomolecules can be efficiently released under mild conditions (25 mM sodium dithionite) and the small (262.30 Da) molecular fragment left on the labeled protein following cleavage. These features make the Diazo probe especially attractive for use in biomolecular labeling and proteomic studies.

## SPECIFICATIONS

**CAS Number**

N/A

**For research use only. Not intended for therapeutic or diagnostic use in animals or humans.**



<b>Molecular Weight</b>	795.54
<b>Appearance</b>	Dark orange solid
<b>Chemical Formula</b>	C39H53N7O9S
<b>Molecular Weight Left Behind</b>	262.3
<b>Unit Size</b>	1 mg, 5 mg, 25 mg
<b>Solubility</b>	DMSO, DMF
<b>Storage Instructions</b>	-20°C.
<b>Shipping Conditions</b>	Ambient temperature
<b>Shipping Instructions</b>	Ambient temperature

## SELECTED REFERENCES

1. Loebel , C., *et al.* (2022). Metabolic labeling of secreted matrix to investigate cell-material interactions in tissue engineering and mechanobiology. *Nat Protoc.*, **10.1038**, Online ahead of print. [[PubMed](#)]
2. Pratt Matthew R., *et al.* (2020). Acetylated Chemical Reporters of Glycosylation Can Display Metabolism-Dependent Background Labeling of Proteins but Are Generally Reliable Tools for the Identification of Glycoproteins. *Frontiers in Chemistry*, **8**, 318. [[Frontiers in Chemistry](#)]
3. Chuch N.C., *et al.* (2017). The New Chemical Reporter 6-Alkynyl-6-deoxy-GlcNAc Reveals O-GlcNAc Modification of the Apoptotic Caspases That Can Block the Cleavage/Activation of Caspase-8. *J. Am. Chem. Soc.*, **139**: 7872-85. [[PubMed](#)]
4. Ying-Yu Y., *et al.* (2011). Identification of lysine acetyltransferase p300 substrates using 4-pentynoyl-coenzyme A and bioorthogonal proteomics. *Bioorg. Med. Chem. Lett.*, **21**: 4976-79. [[PubMed](#)]
5. Yang Y.Y., *et al.* (2010). Comparative Analysis of Cleavable Azobenzene-Based Affinity Tags for Bioorthogonal Chemical Proteomics. *Chemistry & Biology. Chem. Biol.* **17**: 2112-22. [[PubMed](#)]

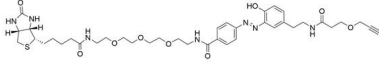
## DOCUMENTS

- [Safety Data Sheet](#)
- [Download CoA](#)
- [User Guide](#)
- [Datasheet](#)

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## GALLERY IMAGES



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