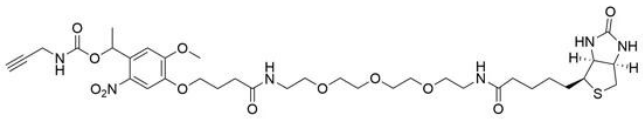
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PC BIOTIN ALKYNE

SKU: CCT-1118



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.

PC Biotin Alkyne 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 photocleavable linker. Captured biomolecules can be efficiently released under mild, reagent-free conditions (irradiation with near-UV, low intensity lamp) and the small molecular fragment (55.07 Da) left on the labeled protein following cleavage. These features make the photocleavable probe especially attractive for use in biomolecular labeling and proteomic studies.

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SPECIFICATIONS

CAS Number	N/A
Molecular Weight	780.34
Appearance	Yellow amorphous solid to yellow oil
Chemical Formula	C35H52N6O12S
Molecular Weight Left Behind	55.07
Unit Size	1 mg, 5mg, 25 mg
Solubility	DMSO, DMF, THF, DCM, Chloroform
Storage Instructions	-20°C.
Shipping Conditions	Frozen
Shipping Instructions	Frozen

SELECTED REFERENCES

1. Szychowski, J., *et al.* (2010). Cleavable Biotin Probes for Labeling of Biomolecules via Azide−Alkyne Cycloaddition. *J. Am. Chem. Soc.,* **132**: 18351-60. [PubMed]
2. Wang, Z., *et al*. (2010). Enrichment and Site Mapping of O-Linked N-Acetylglucosamine by a Combination of Chemical/Enzymatic Tagging, Photochemical Cleavage, and Electron Transfer Dissociation Mass Spectrometry *Mol. Cell. Proteom.*. **9**: 153-60. [PubMed]
3. Kim, H., *et al*. (2009). An Azido-Biotin Reagent for Use in the Isolation of Protein Adducts of Lipid-derived Electrophiles by Streptavidin Catch and Photorelease.*Mol. Cell. Proteom.,* . **8**: 2080-89. [PubMed]
4. Olejnik, J., *et al*. (1995). An Azido-Biotin Reagent for Use in the Isolation of Protein Adducts of Lipid-derived Electrophiles by Streptavidin Catch and Photorelease.*Proc. Natl. Acad. Sci.*. **92**: 7590-754. [PubMed]

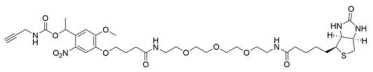
DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

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