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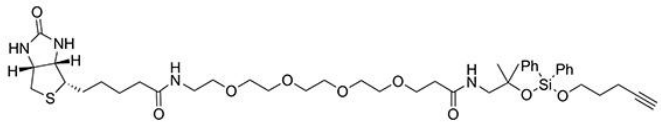
DADPS BIOTIN ALKYNE

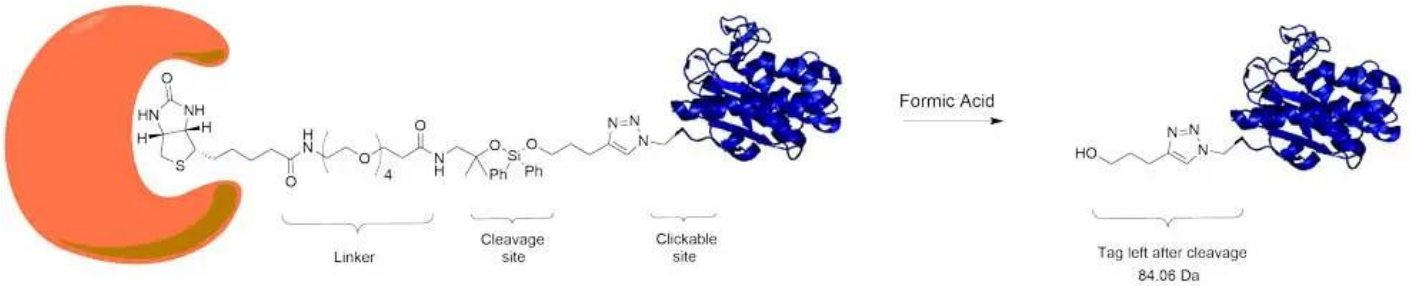
SKU: CCT-1331



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.

DADPS (dialkoxydiphenylsilane) 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 cleavable DADPS linker. Captured biomolecules can be efficiently released under mild conditions (10% formic acid, 0.5 h) and the small (84 Da) molecular fragment left on the labeled protein following cleavage. These features make the DADPS probe especially attractive for use in biomolecular labeling and proteomic studies.



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SPECIFICATIONS

CAS Number	N/A
Molecular Weight	84.12
Appearance	Oil to amorphous solid
Chemical Formula	C42H62N4O9SSi
Unit Size	1 mg, 5 mg, 25 mg
Solubility	DMSO, DMF, THF, DCM, Chloroform
Storage Instructions	-20°C.
Shipping Conditions	Frozen
Shipping Instructions	Frozen

SELECTED REFERENCES

1. Wang, C., *et al.* (2020). Chemoproteomic Profiling of Itaconation by Bioorthogonal Probes in Inflammatory Macrophages. *J Am Chem Soc.*, **142 (25)**, 10894-10898. [PubMed]
2. Willems, L. I., *et al.* (2020). Tandem Bioorthogonal Labeling Uncovers Endogenous Cotranslationally *O*-GlcNAc Modified Nascent Proteins. *J Am Chem Soc.*, **142 (37)**, 15729-15739. [PubMed]
3. Simon P. Wisnovsky, *et al.* (2020). Metabolic precision labeling enables selective probing of O-linked N-acetylgalactosamine glycosylation. *PNAS,* **117 (41)**, 25293-25301. [PNAS]
4. Wang, J., *et al*. (2015). Mapping sites of aspirin-induced acetylations in live cells by quantitative acid-cleavable activity-based protein profiling (QA-ABPP).*Sci. Rep.*. **5**: 7896. [PubMed]
5. Jinxu, G., *et al*. (2012). Small Molecule Interactome Mapping by Photoaffinity Labeling Reveals Binding Site Hotspots for the NSAIDs. *J. Am. Chem. Soc.,*. **140**: 4259-68. [PubMed]
6. Szychowski, J., *et al.* (2010). Cleavable Biotin Probes for Labeling of Biomolecules via Azide−Alkyne Cycloaddition. *J. Am. Chem. Soc.,* **132**: 18351-60. [PubMed]

DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

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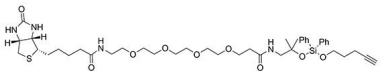
GALLERY IMAGES



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