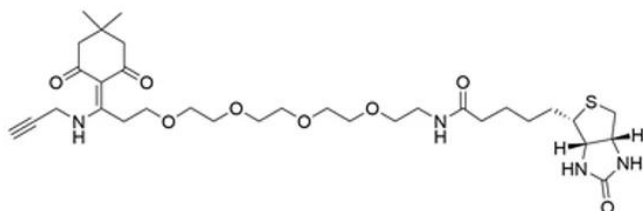




DDE BIOTIN ALKYNE

SKU: CCT-1137

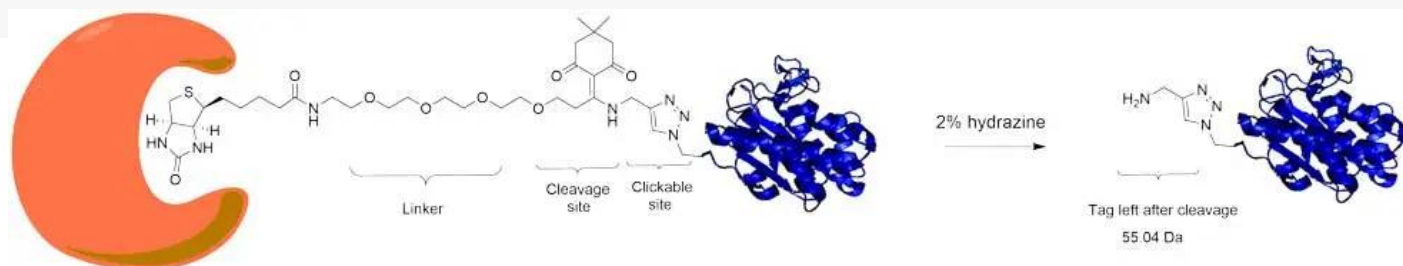


DESCRIPTION

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.

Dde Biotin Alkyne probe eliminates a major limitation of the streptavidin-biotin affinity purification. This reagent contains a biotin moiety linked to an alkyne through a spacer arm containing a hydrazine-cleavable Dde moiety.. Captured biomolecules can be efficiently released under mild conditions (2% aqueous hydrazine solution), and the small molecular fragment (55.07 Da) left on the labeled protein following the cleavage. These features make the cleavable probe especially attractive for use in biomolecular labeling and proteomic studies.

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



SPECIFICATIONS

CAS Number	N/A
Molecular Weight	650.83
Appearance	Glass-like solid
Chemical Formula	C ₃₂ H ₅₀ N ₄ O ₈ S
Molecular Weight Left Behind	55.07
Unit Size	1 mg, 5 mg, 25 mg
Solubility	DMSO, DMF, THF, DCM, Chloroform
Storage Instructions	-20°C.
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

SELECTED REFERENCES

1. Yang Y., et al. (2013). Cleavable Trifunctional Biotin Reagents for Protein Labeling, Capture, and Release. *Chem. Commun.*, **48**: 5366-86. [[PubMed](#)]
2. Matthew E. G., et al. (2017). Comprehensive Mapping of O-GlcNAc Modification Sites Using a Chemically Cleavable Tag. *Mol. Biosyst.*, **12**: 1756-59. [[PubMed](#)]
3. Gertsik N., et al. (2017). Mapping the Binding Site of BMS-708163 on γ-Secretase with Cleavable Photoprobes. *Cell Chemical Biology*, **32**: 3-8. [[PubMed](#)]

DOCUMENTS

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

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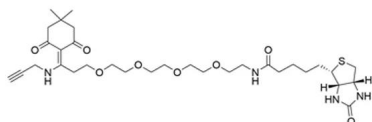


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GALLERY IMAGES



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