

Product Information

Biotin/Picolyl azide PEG reagent, Dde biotin-PEG4-picolyl azide, Purity 95%

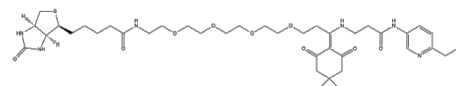
Cat. No.: X24-03-YW0144

Size: 5 mg; 25 mg

PubChem CID: 137045447

Synonym: AKOS040741617; BP-23340; HY-140917; CS-0115606

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	Dde biotin-PEG4-picolyl azide is a cleavable biotin reagent featuring a picolyl azide moiety, facilitating conjugation with alkyne-containing biomolecules. This biotin reagent includes a copper-chelating motif that significantly enhances the Cu(I)-catalyzed Click Chemistry reaction. The hydrophilic spacer arm ensures improved solubility of the labeled molecules in aqueous media.
Molecular Weight	816.0
Molecular Formula	C ₃₈ H ₅₇ N ₉ O ₉ S
Functional Group 1	Biotin
Functional Group 2	Picolyl azide
Functional Group 3	None
Reactive Group 1	Alkyne
IUPAC Name	5-[(3aS,4S,6aR)-2-oxo-1,3,3a,4,6,6a-Hexahydrothieno[3,4-d]imidazol-4-yl]-N-[2-[2-[2-[2-[3-[3-[[6-(azidomethyl)pyridin-3-yl]amino]-3-oxopropyl]imino-3-(2-hydroxy-4,4-dimethyl-6-oxocyclohexen-1-yl)propoxy]ethoxy]ethoxy]ethoxy]ethyl]pentanamide
InChI	InChI=1S/C38H57N9O9S/c1-38(2)21-30(48)35(31(49)22-38)28(40-11-9-34(51)44-27-8-7-26(42-23-27)24-43-47-39)10-13-53-15-17-55-19-20-56-18-16-54-14-12-41-33(50)6-4-3-5-32-36-29(25-57-32)45-37(52)46-36/h7-8,23,29,32,36,48H,3-6,9-22,24-25H2,1-2H3,(H,41,50)(H,44,51)(H2,45,46,52)/t29-,32-,36-/m0/s1
InChI Key	DCSHIGVYFAFOCE-RHLYCORQSA-N
Canonical SMILES	CC1(CC(=C(C(=O)C1)C(=NCCC(=O)NC2=CN=C(C=C2)CN=[N+]=[N-])CCOCCOCCOCCOCCNC(=O)CCCCC3C4C(CS3)NC(=O)N4)O)C
Isomeric SMILES	CC1(CC(=C(C(=O)C1)C(=NCCC(=O)NC2=CN=C(C=C2)CN=[N+]=[N-])CCOCCOCCOCCOCCNC(=O)CCCC[C@H]3[C@@H]4[C@H](CS3)NC(=O)N4)O)C
Form	Liquid

Purity	95%
Identity	Confirmed by NMR.
Applications	Dde biotin-PEG4-picolyl azide is extensively utilized in bioconjugation studies for labeling biomolecules, including proteins, peptides, and nucleic acids. The specific attachment of biotin to target molecules enables subsequent affinity purification, detection, and visualization using streptavidin-based assays such as Western blotting, immunofluorescence, and flow cytometry.
Storage	Store at -20°C