

Product Information

Alkyne/Biotin PEG reagent, Biotin-PEG2-C4-alkyne, Purity 98%

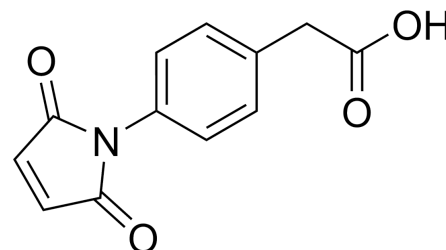
Cat. No.: X24-10-WXX144

Size: 10 mg

CAS Number: 1011268-28-2

PubChem CID: 91757769

Synonym: Biotin-PEG2-C4-alkyne; 1011268-28-2; *N*-[2-[2-[2-[5-[(3*a*S,4*S*,6*a*R)-2-oxo-1,3,3*a*,4,6,6*a*-hexahydrothieno[3,4-*d*]imidazol-4-yl]pentanoylamino]ethoxy]ethoxy]ethyl]hex-5-ynamide; Alkynyl-biotin; AKOS040741343



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

Product Information

Description	Biotin-PEG2-C4-alkyne is a biotinylation reagent designed for copper-catalyzed click chemistry reactions to form a stable triazole linkage.
Molecular Weight	468.6
Molecular Formula	C ₂₂ H ₃₆ N ₄ O ₅ S
Functional Group 1	Alkyne
Functional Group 2	Biotin
Functional Group 3	None
Reactive Group 1	Azide
IUPAC Name	<i>N</i> -[2-[2-[2-[5-[(3 <i>a</i> S,4 <i>S</i> ,6 <i>a</i> R)-2-oxo-1,3,3 <i>a</i> ,4,6,6 <i>a</i> -hexahydrothieno[3,4- <i>d</i>]imidazol-4-yl]pentanoylamino]ethoxy]ethoxy]ethyl]hex-5-ynamide
InChI	InChI=1S/C22H36N4O5S/c1-2-3-4-8-19(27)23-10-12-30-14-15-31-13-11-24-20(28)9-6-5-7-18-21-17(16-32-18)25-22(29)26-21/h1,17-18,21H,3-16H2,(H,23,27)(H,24,28)(H2,25,26,29)/t17-,18-,21-/m0/s1
InChI Key	BMIRHLAYBWVOC-WFXMLNOXSA-N
Canonical SMILES	C#CCCCC(=O)NCCOCCOCCNC(=O)CCCC1C2C(CS1)NC(=O)N2
Isomeric SMILES	C#CCCCC(=O)NCCOCCOCCNC(=O)CCCC[C@H]1[C@@H]2[C@H](CS1)NC(=O)N2
Form	Solid
Purity	98%
Solubility	DMSO, DMF
Identity	Confirmed by NMR.

Applications

Biotin-PEG2-C4-alkyne is used in molecular biology and bioconjugation research, facilitating efficient copper-catalyzed click chemistry reactions with azide moiety to form a stable triazole linkage, making it ideal for studying biomolecular interactions and developing targeted drug delivery systems.

Storage

Store at -20°C.
