

Biotin/TFP PEG reagent, Biotin-PEG12-TFP ester, Purity 98%

MDL: MFCD28385459

PubChem CID: 91757809

41-oxo-45-((3*a*S,4*S*,6*a**R*)-2-oxohexahydro-1*H*

-thienof[3,4-d]imidazol-4-yl)-4,7,10,13,16,19,22,25,28,31,34,37-dodecaoxa-40-azapent

atetracontanoate; Biotin-PEG12-TFPester

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

Product Information

Description	Biotin-PEG12-TFP ester is a biotinylation reagent designed to conjugate with amine (-NH ₂) compounds, forming stable amide bonds. Its hydrophilic PEG spacer arm enhances water solubility in the resulting biotinylated molecules.
Molecular Weight	992.1
Molecular Formula	C ₄₃ H ₆₉ F ₄ N ₃ O ₁₆ S
Functional Group 1	Biotin
Functional Group 2	TFP
Functional Group 3	None
Reactive Group 1	Amine
IUPAC Name	(2,3,5,6-Tetrafluorophenyl) 3-[2-[2-[2-[2-[2-[2-[2-[2-[2-[5-[(3aS,4S,6aR)-2-oxo-1,3,3a,4,6,6a-hexahydrothieno[3,4-d]imidazol-4-yl]pentanoylamino]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]propanoate
InChI	InChI=1S/C43H69F4N3O16S/c44-33-31-34(45)40(47)42(39(33)46)66-38(52)5-7-54-9-11-56-13-15-58-17-19-60-21-23-62-25-27-64-29-30-65-28-26-63-24-22-61-20-18-59-16-14-57-12-10-55-8-6-48-37(51)4-2-1-3-36-41-35(32-67-36)49-43(53)50-41/h31,35-36,41H,1-30,32H2,(H,48,51)(H2,49,50,53)/t35-,36-,41-/m0/s1
InChI Key	YQTIPJSYUMZZNU-XRBIJUOGSA-N
Canonical SMILES	C1C2C(C(S1)CCCCC(=O)NCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCC(=O)O)

	<chem>C3=C(C(=CC(=C3F)F)F)F)NC(=O)N2</chem>
Isomeric SMILES	<chem>C1[C@H]2[C@@H]([C@@H](S1)CCCCC(=O)NCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCC(=O)OC3=C(C(=CC(=C3F)F)F)F)NC(=O)N2</chem>
Form	Solid
Purity	98%
Identity	Confirmed by NMR.
Applications	Biotin-PEG12-TFP ester finds widespread use in bioconjugation applications, where it enables efficient and specific labeling of proteins, peptides, nucleic acids, and other biomolecules. The resulting biotinylated conjugates are valuable tools for various applications, including affinity purification, detection, imaging.
Storage	Store at -20°C