

Product Information

Sulfo DBCO/TFP PEG reagent, Sulfo DBCO-TFP ester, Purity 95%

Cat. No.: X24-03-YW0324

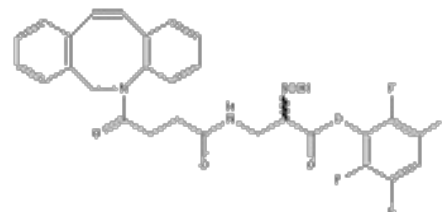
Size: 10 mg; 25 mg; 100 mg; 500 mg

CAS Number: 2268816-76-6

PubChem CID: 164577360

Synonym: 2268816-76-6; Sulfo DBCO-TFP ester; HY-151789; CS-0620034

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



Product Information

Description	Sulfo DBCO-TFP ester is a water-soluble labeling reagent designed for efficient incorporation of the Sulfo DBCO moiety onto amine-containing molecules. Featuring an amine-reactive TFP ester group, this reagent facilitates straightforward and effective bioconjugation reactions. The presence of a hydrophilic, sulfonated spacer arm significantly enhances the water solubility of DBCO-modified molecules, often rendering them completely soluble in aqueous media. Additionally, the short spacer arm minimally affects the mass of the modified molecules, preserving their structural integrity and functionality.
Molecular Weight	604.5
Molecular Formula	C ₂₈ H ₂₀ F ₄ N ₂ O ₇ S
Functional Group 1	Sulfo DBCO
Functional Group 2	TFP
Functional Group 3	None
IUPAC Name	3-[[4-(2-Azatricyclo[10.4.0.0 ^{4,9}]hexadeca-1(16),4,6,8,12,14-hexaen-10-yn-2-yl)-4-oxobutanoyl]amino]-1-oxo-1-(2,3,5,6-tetrafluorophenoxy)propane-2-sulfonic acid
InChI	InChI=1S/C28H20F4N2O7S/c29-19-13-20(30)26(32)27(25(19)31)41-28(37)22(42(38,39)40)14-33-23(35)11-12-24(36)34-15-18-7-2-1-5-16(18)9-10-17-6-3-4-8-21(17)34/h1-8,13,22H,11-12,14-15H2,(H,33,35)(H,38,39,40)
InChI Key	OXCOLSMUBAPWNW-UHFFFAOYSA-N
Canonical SMILES	C1C2=CC=CC=C2C#CC3=CC=CC=C3N1C(=O)CCC(=O)NCC(C(=O)OC4=C(C(=CC(=C4F)F)F)F)S(=O)(=O)O
Form	Reported
Purity	95%

Solubility	DMSO, DMF, DCM, THF, Chloroform, Water
Identity	Confirmed by NMR.
Applications	Sulfo DBCO-TFP ester is widely utilized in bioconjugation applications, particularly for labeling and functionalizing amine-containing biomolecules such as proteins, peptides, and antibodies. Its water solubility and efficient reactivity make it ideal for preparing conjugates for various biochemical assays, imaging studies, and therapeutic applications.
Storage	Store at -20°C