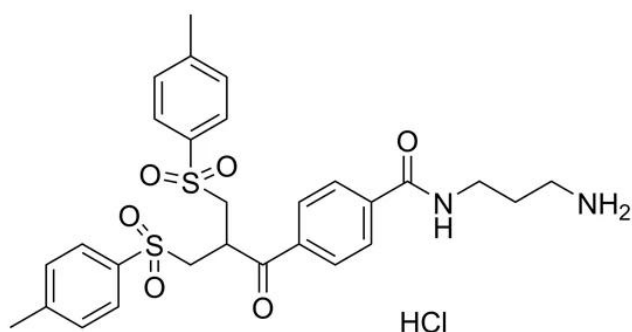




BIS-SULFONE AMINE

SKU: CCT-1148



DESCRIPTION

Bis-sulfone Amine is a bis-alkylating labeling reagent that is selective for the cysteine sulfur atoms from a native disulfide. These reagents undergo bis-alkylation to conjugate both thiols derived from the two cysteine residues of a reduced native disulfide bond such as the interchain disulfide bonds of an antibody. The reaction results in covalent rebridging of the disulfide bond via a three carbon bridge leaving the protein structurally intact.

The covalent, site-specific conjugation of PEG to a polyhistidine tag (His-tag) on a protein with bis-alkylating reagents was also reported in literature (see Selected References section).

SPECIFICATIONS

CAS Number	N/A
Molecular Weight	593.15
Molecular Formula	C ₂₈ H ₃₃ ClN ₂ O ₆ S ₂
Appearance	Grey amorphous solid
Chemical Formula	C ₂₈ H ₃₃ ClN ₂ O ₆ S ₂

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Purity	>95% (HPLC)
Unit Size	1000 mg, 5 g
Solubility	DMSO, DMF, DCM, THF, Chloroform
Storage Instructions	-20°C. Desiccate
Shipping Conditions	Ambient temperature
Shipping Instructions	Ambient temperature

SELECTED REFERENCES

1. Khalili, H., *et al.* (2012). Comparative Binding of Disulfide-Bridged PEG-Fabs. *Bioconjug. Chem.*, **23(11)**, 2262-77. [[PubMed](#)]
2. Badescu, G., *et al.* (2014). Bridging Disulfides for Stable and Defined Antibody Drug Conjugates. *Bioconjug. Chem.*, **25(6)**, 1124-36. [[PubMed](#)]
3. Brocchini, S., *et al.* (2008). Disulfide bridge based PEGylation of proteins. *Adv Drug Deliv Rev.*, **60**, 3-12. [[PubMed](#)]
4. Balan, S., *et al.* (2007). Site-Specific PEGylation of Protein Disulfide Bonds Using a Three-Carbon Bridge. *Bioconjugate Chem.*, **18**, 61-76. [[PubMed](#)]
5. Wang, T., *et al.* (2014). Bis-sulfide bioconjugates for glutathione triggered tumor responsive drug release. *ChemComm.*, **50**, 1116-1118. [[PubMed](#)]
6. Wilbur, T., *et al.* (1994). Monoclonal antibody Fab' fragment cross-linking using equilibrium transfer alkylation reagents. A strategy for site-specific conjugation of diagnostic and therapeutic agents with F(ab')₂ fragments. *Bioconjugate Chem.*, **5**, 220-235. [[PubMed](#)]

Site specific conjugation to a polyhistidine tag (His-tag).

1. Cong, Y., *et al.* (2012). Site-Specific PEGylation at Histidine Tags. *Bioconjugate Chem.*, **23**, 148-263. [[PubMed](#)]

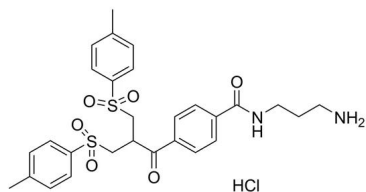
DOCUMENTS

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