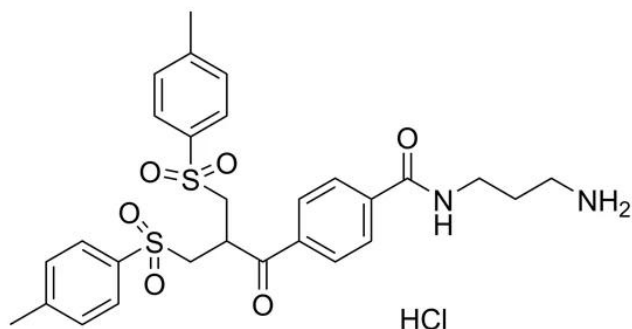




BIS-SULFONE AMINE

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 CIN ₂ O ₆ S ₂ |
| Appearance | Grey amorphous solid |
| Chemical Formula | C ₂₈ H ₃₃ CIN ₂ O ₆ S ₂ |

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.



| | |
|------------------------------|---------------------------------|
| 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](#)]

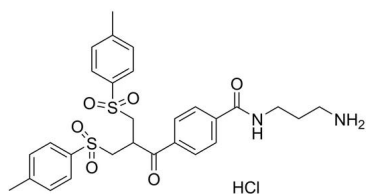
DOCUMENTS

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

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.



GALLERY IMAGES



For research use only. Not intended for therapeutic or diagnostic use in animals or humans.