

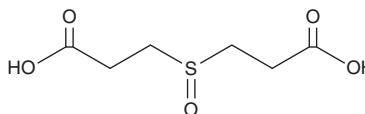
PRODUCT INFORMATION



3,3'-Sulfinyldipropionic Acid

Item No. 37214

CAS Registry No.: 3680-08-8
Formal Name: 3,3'-sulfinylbis-propanoic acid
Synonyms: 3,3'-Sulfinyldipropionic Acid,
3,3'-Thiodipropionic Acid
MF: C₆H₁₀O₅S
FW: 194.2
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

3,3'-Sulfinyldipropionic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 3,3'-sulfinyldipropionic acid in the solvent of choice, which should be purged with an inert gas. 3,3'-Sulfinyldipropionic acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 3,3'-sulfinyldipropionic acid in these solvents is approximately 2 and 3 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 3,3'-sulfinyldipropionic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3,3'-sulfinyldipropionic acid in PBS (pH 7.2) is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3,3'-Sulfinyldipropionic acid is an inhibitor of apurinic-apyrimidinic endonuclease 1/redox factor-1 (APE1/Ref-1; IC₅₀ = 40 μM), an enzyme involved in base excision repair.¹ It is also a building block in the synthesis of the protein cross-linking probe disuccinimidyl sulfoxide (DSSO; Item No. 9002863).²

References

1. Zawahir, Z., Dayam, R., Deng, J., *et al.* Pharmacophore guided discovery of small-molecule human apurinic/apyrimidinic endonuclease 1 inhibitors. *J. Med. Chem.* **52**(1), 20-32 (2009).
2. Kao, A., Chiu, C.-I., Vellucci, D., *et al.* Development of a novel cross-linking strategy for fast and accurate identification of cross-linked peptides of protein complexes. *Mol. Cell. Proteomics* **10**(1), M110.002212 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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