

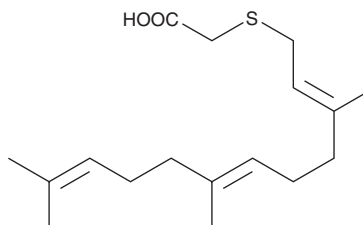
PRODUCT INFORMATION



S-Farnesyl Thioacetic Acid

Item No. 63260

CAS Registry No.: 135784-48-4
Formal Name: (3,7,11-trimethyl-2E,6E,10-dodecatrienyl)thioacetic acid
Synonym: FTA
MF: C₁₇H₂₈O₂S
FW: 296.5
Purity: ≥97%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

S-Farnesyl thioacetic acid is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of S-Farnesyl thioacetic acid in these solvents is approximately 20 mg/ml.

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. If an organic solvent-free solution of S-Farnesyl thioacetic acid is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. For maximum aqueous solubility, S-Farnesyl thioacetic acid can be directly dissolved in 0.1 M Na₂CO₃ (63 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

Description

S-Farnesyl thioacetic acid is an analog of S-farnesyl cysteine which behaves as a competitive inhibitor of isoprenylated protein methyltransferase (also known as S-adenosylmethionine-dependent methyltransferase), and it can inhibit methylation of both farnesylated and geranylgeranylated substrates.¹⁻³

References

1. Rando, R.R., Chemical Biology of protein isoprenylation/methylation. *Biochim. Biophys. Acta* **1300**, 5-16 (1996).
2. Volker, C., Lane, P., Kwee, C., *et al.* A single activity carboxyl methylates both farnesyl and geranylgeranyl cysteine residues. *FEBS Lett.* **295**, 189-194 (1991).
3. Pérez-Sala, D., Gilbert, B.A., Tan, E.W., *et al.* Prenylated protein methyltransferases do not distinguish between farnesylated and geranylgeranylated substrates. *Biochem. J.* **284**, 835-840 (1992).

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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