

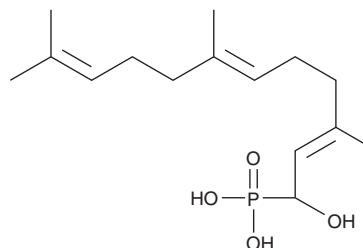
PRODUCT INFORMATION



α -hydroxy Farnesyl Phosphonic Acid

Item No. 63420

CAS Registry No.: 148796-53-6
Formal Name: (\pm)-1-hydroxy-3,7,11-trimethyl-2E,6E,10-dodecatriene-1-phosphonic acid
Synonym: Hydroxyfarnesyl Phosphate
MF: C₁₅H₂₇O₄P
FW: 302.4
Purity: \geq 98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

α -hydroxy Farnesyl Phosphonic Acid is supplied as a crystalline solid. A stock solution may be made by dissolving the α -hydroxy farnesyl phosphonic acid in the solvent of choice. α -hydroxy Farnesyl Phosphonic Acid is soluble in ethanol at a concentration of approximately 25 mg/ml.

α -hydroxy Farnesyl Phosphonic Acid is sparingly soluble in aqueous solutions. For greater aqueous solubility, α -hydroxy farnesyl phosphonic acid can be directly dissolved in 10 mM Na₂CO₃ (freely soluble) 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

α -hydroxy Farnesyl Phosphonic Acid is a nonhydrolyzable analog of farnesyl pyrophosphate which acts as a competitive inhibitor of farnesyl transferase (FTase).^{1,2} At concentrations greater than 1 μ M, α -hydroxy farnesyl phosphonic acid inhibits the processing of Ras in Ha-ras-transformed NIH3T3 cells.³

References

1. Pompliano, D.L., Rands, E., Schaber, M.D., *et al.* Steady-state kinetic mechanism of ras farnesyl: Protein transferase. *Biochemistry* **31**, 3800-3807 (1992).
2. Hohl, R.J., Lewis, K.A., Cermak, D.M., *et al.* Stereochemistry-dependent inhibition of Ras farnesylation by farnesylphosphonic acids. *Lipids* **33**, 39-46 (1998).
3. Gibbs, J.B., Pompliano, D.L., Mosser, S.D., *et al.* Selective inhibition of farnesyl-protein transferase blocks ras processing *in vivo*. *J. Biol. Chem.* **268**, 7617-7620 (1993).

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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