

Product Information

Zaragozic acid A, trisodium salt

Catalog Number **Z2626**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

CAS RN 144541-82-2

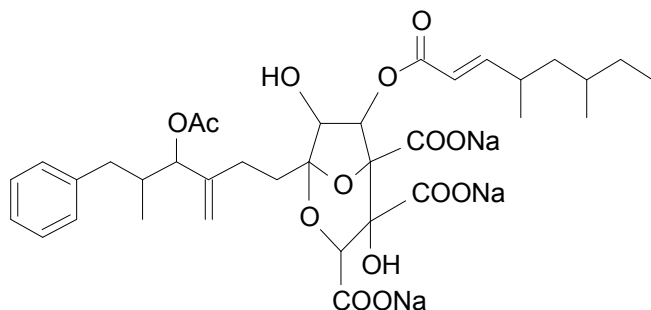
Synonym: Squalostatins

Product Description

Molecular Formula: $\text{C}_{35}\text{H}_{43}\text{O}_{14}\text{Na}_3$

Molecular Weight: 756.70

Purity: $\geq 95\%$ (HPLC)



Zaragozic acid A is a potent inhibitor, both *in vivo* and *in vitro*, of squalene synthase from mammalian, fungal and yeast (*Saccharomyces cerevisiae*) sources.¹⁻³ Squalene synthase is the initial committed enzyme in sterol synthesis and is responsible for the reductive condensation of farnesyl pyrophosphate to form squalene.⁴ Zaragozic acid A acts by mimicking the substrate farnesyl pyrophosphate and the reaction intermediate presqualene pyrophosphate, through a process that confers increased apparent potency in the presence of reduced enzyme concentrations.⁵ As an inhibitor of squalene synthesis, zaragozic acid A is responsible for lower plasma cholesterol levels in primates.² It has been shown to inhibit cholesterol formation in primary rat hepatocytes,⁶ in cultured human hepatic cells,¹ and in experimental animals.^{1,6,7} Treatment of rats with zaragozic acid A caused an increase in hepatic low density lipoprotein (LDL) receptor mRNA levels.¹

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

This product is soluble in ethanol (10 mg/ml) and DMSO (10 mg/ml, heating required), yielding a clear, colorless to faint yellow solution.

Storage/Stability

This product ships on wet ice and storage at $-20\text{ }^{\circ}\text{C}$ is recommended. The product as supplied is stable for 2 years if stored desiccated at $-20\text{ }^{\circ}\text{C}$. The lyophilized powder can be stored at room temperature for one week without decomposition.

The product in solution is stable if stored at $-20\text{ }^{\circ}\text{C}$ and after freeze-thaw cycles. However it is important to minimize exposure of the solution to room temperature, since it will decompose.

References

1. Bergstrom, J.D., Proc. Natl. Acad. Sci. USA, **90**, 80 (1993).
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3. Petras, S.F., et al., J. Lipid Res., **40**, 24 (1999).
4. Kennedy, M.A., Biochim. Biophys. Acta, **1445**, 110 (1999).
5. Lindsey, S., and Harwood, H.J., J. Biol. Chem., **270**, 9083-96 (1995).
6. Baxter, A., et al., J. Biol. Chem., **267**, 11705-8 (1992).
7. Ness, G.C., et al., Arch. Biochem. Biophys., **311**, 277-85 (1994).

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