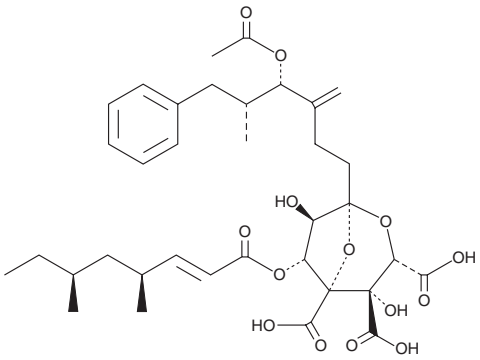
PRODUCT INFORMATION

Zaragozic Acid A

Item No. 17452

CAS Registry No.: 142561-96-4
Formal Name: (7S)-11-acetate 5-[(2E,4S,6S)-4,6-dimethyl-2-octenoate]-2,7-anhydro-3,4-di-C-carboxy-8,9,10,12,13-pentadeoxy-10-methylene-12-(phenylmethyl)-L-erythro-L-glycero-D-altro-7-trideculo-7,4-furanosonic acid
Synonyms: L-694,599, Squalestatin S_1
MF: $C_{35}H_{46}O_{14}$
FW: 690.7
Purity: ≥95%
Supplied as: A 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

Zaragozic acid A is supplied as a solid. A stock solution may be made by dissolving the zaragozic acid A in the solvent of choice, which should be purged with an inert gas. Zaragozic acid A is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Squalene synthase catalyzes the first committed step in cholesterol synthesis, mediating the reductive dimerization of farnesyl pyrophosphate (Item No. 63250) to produce squalene.[1] Zaragozic acid A is a fungal metabolite that acts as a reversible competitive inhibitor of squalene synthase (K_i = 78 pM *in vitro*).[2] It dose-dependently reduces cholesterol synthesis in HepG2 cells (IC_{50} = 6 µM) and inhibits hepatic cholesterol synthesis in mice (ED_{50} = 0.2 mg/kg).[2] Zaragozic acid A also inhibits farnesyl transferase (FTase) and geranylgeranyl transferase type I (GGTase I) (IC_{50}s = 216 and 50 nM, respectively).[3]

References

1. Charlton-Menys, V. and Durrington, P.N. Squalene synthase inhibitors: Clinical pharmacology and cholesterol-lowering potential. *Drugs* **67(1)**, 11-16 (2007).
2. Bergstrom, J.D., Kurtz, M.M., Rew, D.J., *et al.* Zaragozic acids: A family of fungal metabolites that are picomolar competitive inhibitors of squalene synthase. *Proc. Natl. Acad. Sci. USA* **90(1)**, 80-84 (1993).
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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM