Product Information



Fusidic Acid (sodium salt)

Item No. 14825

CAS Registry No.: 751-94-0

Formal Name: $(4\alpha,8\alpha,9\beta,13\alpha,14\beta)$ -16 β -(acetyloxy)-

> 3α,11α-dihydroxy-29-nordammara-17Z(20),24-dien-21-oic acid,

monosodium salt

Synonym: SQ 16,360 MF: C₃₁H₄₇O₆ • Na

538.7 FW: ≥98% **Purity:**

Stability: ≥2 years at -20°C Supplied as: A crystalline solid

• Na⁺ HO

Laboratory Procedures

For long term storage, we suggest that fusidic acid (sodium salt) be stored as supplied at -20°C. It should be stable for

Fusidic acid (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the fusidic acid (sodium salt) in the solvent of choice. Fusidic acid (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of fusidic acid (sodium salt) in ethanol is approximately 12.5 mg/ml and approximately 14 mg/ml in DMSO and DMF.

Fusidic acid (sodium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, fusidic acid (sodium salt) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Fusidic acid (sodium salt) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Fusidic acid is a steroidal antibiotic produced by *F. conceineum* that inhibits the translocation function of the elongation factor EF-G (IC₅₀ = ~10-200 μM) during bacterial protein synthesis.¹⁻² Fusidic acid is typically used to inhibit the replication of gram-positive bacteria including Staphylococcus, Streptococcus, and Corynebacterium species. 1

References

- 1. Wilson, D.N. The A-Z of bacterial translation inhibitors. Crit. Rev. Biochem. Mol. Biol. 44(6), 393-433 (2009).
- 2. Obrig, T.G., Culp, W.J., McKeehan, W.L., et al. The mechanism by which cycloheximide and related glutarimide antibiotics inhibit peptide synthesis on reticulocyte ribosomes. J. Biol. Chem. 246, 174-181 (1971).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14825

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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