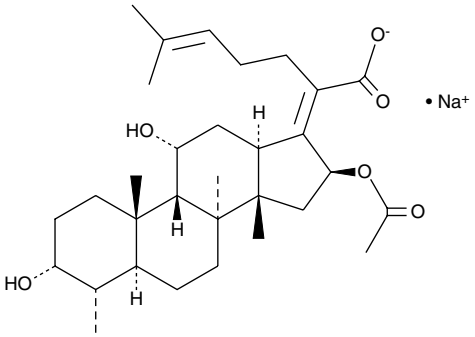
Product Information

Fusidic Acid (sodium salt)

Item No. 14825

CAS Registry No.:	751-94-0
Formal Name:	(4α,8α,9β,13α,14β)-16β-(acetyloxy)-3α,11α-dihydroxy-29-nordammara-17Z(20),24-dien-21-oic acid, monosodium salt
Synonym:	SQ 16,360
MF:	$C_{31}H_{47}O_6$ • Na
FW:	538.7
Purity:	≥98%
Stability:	≥2 years at -20°C
Supplied as:	A crystalline solid



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 at least two years.

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. conccineum* that inhibits the translocation function of the elongation factor EF-G (IC_{50} = ~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).

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