Elaiophylin

Item No. 15583

CAS Registry No.: 37318-06-2
Formal Name: elaiophylin
Synonyms: Azalomycin-B, Gopalamycin, Salbomycin
MF: C_{54}H_{88}O_{18}
FW: 1,025.3
Purity: ≥95%
Supplied as: A powder
Storage: -20°C
Stability: ≥2 years

Special Conditions: Protect from light when in solution.

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

Laboratory Procedures

Elaiophylin is supplied as a powder. A stock solution may be made by dissolving the elaiophylin in the solvent of choice. Elaiophylin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. Elaiophylin may undergo transformation to methyl ketals when stored in methanol.

Description

Elaiophylin is a macrodiolide antibiotic that can be isolated from various strains of Streptomyces.\(^1\)\(^-\)\(^2\) It displays *in vitro* anti-protozoal activity against both *Plasmodium* and *Trypanosoma* (IC\(_{50}\)s = 370 and 460 ng/ml, respectively) and cytotoxicity against human fetal lung fibroblast MRC-5 cells (IC\(_{50}\) = 870 ng/ml).\(^3\) Elaiophylin alone has no activity against *Candida*, although it enhances the anti-fungal activity of rapamycin (Item No. 13346).\(^2\) Elaiophylin also forms stable, long-lasting ion channels in bilayer membranes that are selective for cations.\(^4\)

References