

PRODUCT DATA SHEET

Elaiophylin Code: BIA-E1028

Pack sizes: 1.0 mg, 5.0 mg

Synonyms : Antibiotic 255-E, Antibiotic 5001B, Antibiotic 56-62, Antibiotic 846 I, Antibiotic

SNA 4606-3, Azalomycin B, Gopalamicin, Salbomycin

Specifications

CAS # : 37318-06-2 Molecular Formula : $C_{54}H_{88}O_{18}$ Molecular Weight : 1025.3

Source : Streptomyces hygroscopicus MST-AS5386

Appearance : White solid

Purity : > 95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Elaiophylin is a highly characteristic metabolite produced by *Streptomyces hygroscopicus*. Elaiophylin inhibits testosterone 5-reductase. It has synergistic antifungal activity with its co-metabolite rapamycin. It has also been found to have anthelminthic and immunosuppressive activity and to inhibit nitric oxide synthesis. Elaiophylin displays broad, albeit weak, biological activity against bacteria, nematodes, protozoa and mammalian tumour cells.

References

1. Cation selective ion channels formed by macrodiolide antibiotic elaiophylin in lipid bilayer membranes. Grigoriev P.A. et al. *Bioelectrochemistry* **2001**, 54, 11.

2. Enhancement of the antifungal activity of rapamycin by the coproduced elaiophylin and nigericin. Fang A. et al. *J Antibiot.* **2000**, 53,158.