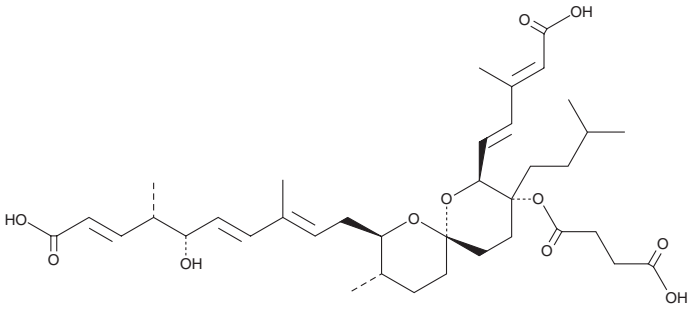
PRODUCT INFORMATION

Reveromycin C

Item No. 23488

CAS Registry No.: 144860-69-5
Formal Name: butanedioic acid, 1-[(2S,3R,6S,8R,9S)-8-[(2E,4E,6S,7S,8E)-9-carboxy-6-hydroxy-3,7-dimethyl-2,4,8-nonatrien-1-yl]-2-[(1E,3E)-4-carboxy-3-methyl-1,3-butadien-1-yl]-9-methyl-3-(3-methylbutyl)-1,7-dioxaspiro[5.5]undec-3-yl] ester
MF: $C_{37}H_{54}O_{11}$
FW: 674.8
Purity: ≥95%
Supplied as: A lyophilisate
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

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

Reveromycin C is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Reveromycin C is a polyketide originally isolated from *Streptomyces* that has antifungal activity against *C. albicans* (MICs = 2.0 and >500 µg/ml at pH 3 and 7.4, respectively).[1,2] Reveromycin C inhibits EGF-induced mitogenic activity in the BALB/MK mouse epidermal cell line.[1] It also reverses the morphology of sarcoma-virus-transformed NRK rat kidney cells (EC_{50} = 1.58 µg/ml) and inhibits proliferation of KB cells and K562 human chronic myelogenous leukemia cells (IC_{50} = 2.0 µg/ml for both).[1]

References

1. Miyazawa, T., Takahashi, S., Kawata, A., *et al.* Identification of middle chain fatty Acyl-CoA ligase responsible for the biosynthesis of 2-alkylmalonyl-CoAs for polyketide extender unit. *J. Biol. Chem.* **290(45)**, 26994-27011 (2015).
2. Takahashi, H., Osada, H., Koshino, H., *et al.* Reveromycins, new inhibitors of eukaryotic cell growth. II. Biological activities. *J. Antibiot. (Tokyo)* **45(9)**, 1414-1419 (1992).

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