

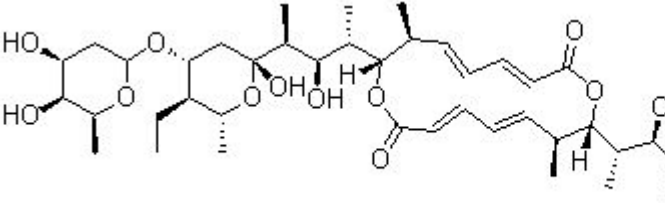


Product Introduction

Elaiophylin

Elaiophylin shows **antiprotozoal** activity against Plasmodium falciparum K1a and Trypanosoma brucei brucei GUTat 3.1 strains with **IC50** of 0.36 μM and 0.45 μM , respectively.

Technical Data:

Molecular Weight (MW):	1025.27	
Formula:	C ₅₄ H ₈₈ O ₁₈	
Solubility (25°C) * <1 mg/ml means slightly soluble or insoluble:	DMSO 49 mg/mL	
	Water <1 mg/mL	
	Ethanol 5 mg/mL	
Purity:	>98%	
Storage:	3 years -20°C Powder	
	6 months-80°C in DMSO	
CAS No.:	37318-06-2	

Biological Activity

Azalomycin-B possesses an antibacterial activity against Gram-positive bacteria. The minimum inhibitory concentration (MIC) of Azalomycin-B against Staphylococcus aureus (SG 511, 285 and 503) is 1.52 μM . The MIC of Azalomycin-B against Streptococcus pyogenes is 0.76 μM and 1.52 μM for strains 306A, and 77A, respectively. The MIC of Azalomycin-B against S. faecium A is 3.05 μM . [1] In vitro, Azalomycin-B shows an antibiotic activity as a rumen fermentation efficiency enhancer and also inhibits lactic acid production in the rumen fluid with IC50 of 2.14 μM . [2] Azalomycin-B inhibits P-type ATPases such as the

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P-type, K⁺-dependent ATPase from Escherichia coli, without affecting F-type and V-type ATPases at all. [3] Azalomycin-B shows the potent cytotoxic effect on L929 mouse fibroblast cells, K562 human leukemia cells and HeLa cell cultures with IC50 of 0.29 μM, 0.19 μM and 0.29 μg/mL, respectively. [4] Moreover, Azalomycin-B also produces the cytotoxicity in MRC-5 cells with IC50 of 0.85 μM. [5] Azalomycin-B is a macrolide antibiotic showing the antiprotozoal activity against Plasmodium falciparum K1a and Trypanosoma brucei brucei GUT at 3.1 strains.

References

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- [6] Fang A, et al. J Antibiot (Tokyo). 2000, 53(2), 158-162.



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