PRODUCT INFORMATION



Leucanicidin

Item No. 25479

CAS Registry No.:		
Formal Name:	(3Z,5E,7R,8S,9S,11E,13E,15S,16R)-16-	
	[(1S,2R,3S)-3-[(2R,4R,5S,6R)-4-[(6-deoxy-	
	2-O-methyl- α -L-mannopyranosyl)oxy]	or jr
	tetrahydro-2-hydroxy-5-methyl-6-(1-	
	methylethyl)-2H-pyran-2-yl]-2-hydroxy-1-	С
		Г ОН С Н
	methylbutyl]-8-hydroxy-3,15-dimethoxy-	0
	5,7,9,11-tetramethyl-oxacyclohexadeca-	ОН
	3,5,11,13-tetraen-2-one	
MF:	$C_{42}H_{70}O_{13}$	
FW:	783.0	
Purity:	≥95%	
,		
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	

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

Laboratory Procedures

Leucanicidin is supplied as a solid. A stock solution may be made by dissolving the leucanicidin in the solvent of choice, which should be purged with an inert gas. Leucanicidin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide. NOTE: Forms methyl ketal on long term storage in methanol.

Leucanicidin 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

Leucanicidin is a macrolide bacterial metabolite originally isolated from S. halstedii.¹ It is toxic to L. separata fourth instar larvae when used at a concentration of 20 ppm and to H. contortus, T. colubriformis, and O. circumcincta larvae (LD₅₀s = 0.23-0.42 μ g/ml).²

References

- 1. Isogai, A., Sakuda, S., Matsumoto, S., et al. The structure of leucanicidin, a novel insecticidal macrolide produced by Streptomyces halstedii. Agr. Biol. Chem. 48(5), 1379-1381 (1984).
- 2. Lacey, E., Gill, J.H., Power, M.L., et al. Bafilolides, potent inhibitors of the motility and development of the free-living stages of parasitic nematodes. Int. J. Parasitol. 25(3), 349-357 (1995).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

SAFETY DATA This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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