LKT Laboratories, Inc.

Magainin 1

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Product Information

Product ID M0124
CAS No. 108433-99-4
Chemical Name

H-Gly-Ile-Gly-Lys-Phe-Leu-His-Ser-Ala-Gly-Lys-Phe-Gly-Lys-Ala-Phe-Val-Gly-Glu-Ile-Met-Lys-Ser-OH

Synonym

Formula $C_{112}H_{177}N_{29}O_{28}S$
Formula Wt. 2409.9
Melting Point
Purity ≥95%
Solubility Soluble in water or 1% acetic acid (1 mg/mL)(clear colorless solution).

Store Temp -20°C
Ship Temp Ambient

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
M0124	0.5 mg	$110.30
M0124	1 mg	$194.30
M0124	2.5 mg	$393.80

Description Magainin 1 is a membrane-disruptive antimicrobial/antibacterial peptide (AMP) initially produced by African frogs. Magainin 1 exhibits antibacterial activity, inhibiting growth of gram positive bacteria by forming ion channels in bacterial membranes and altering membrane permeability; this prevents bacterial adhesion to membranes and inhibits bacterial growth. Magainin 1 also displays potential anticancer benefit in mammalian leukemia cells, increasing levels of ROS and release of cytochrome c and inducing apoptosis.

References

Humblot V, Yala JF, Thebault P, et al. The antibacterial activity of Magainin I immobilized onto mixed thiols Self-Assembled Monolayers. Biomaterials. 2009 Jul;30(21):3503-12. PMID: 19345992.

Cruz-Chamorro L, Puertollano MA, Puertollano E, et al. In vitro biological activities of magainin alone or in combination with nisin. Peptides. 2006 Jun;27(6):1201-9. PMID: 16356589.

Mozsolits H, Wirth HJ, Werkmeister J, et al. Analysis of antimicrobial peptide interactions with hybrid bilayer membrane systems using surface plasmon resonance. Biochim Biophys Acta. 2001 May 2;1512(1):64-76. PMID: 11334625.

Matsuzaki K. Why and how are peptide-lipid interactions utilized for self-defense? Magainins and tachyplesins as archetypes. Biochim Biophys Acta. 1999 Dec 15;1462(1-2):1-10. PMID: 10590299.

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