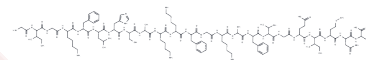


## Magainin 2

## Chemical Properties

CAS No. :	108433-95-0
Formula:	C114H180N30O29S
Molecular Weight:	2466.9
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Magainin II is a member of the antimicrobial peptides family
Targets(IC50)	Antibacterial,Antibiotic,Antifungal
In vitro	Magainin 2 exhibits bactericidal activity by permeabilizing cell membranes and inducing early apoptosis-like morphological changes in Escherichia coli. It enhances the expression of a bacterial protein with caspase substrate affinity and modulates RecA expression, akin to caspase-like proteins. Notably, it disrupts membranes without significant harm to mammalian cells, targeting primarily the lipid matrix. In Paramecium caudatum, a protozoan, magainin 2 at 10 µg/mL induces osmotic swelling and cell burst by interfering with membrane functions crucial for osmotic regulation. Its mechanism differs in bacterial and mammalian cells; it forms approximately 2.8 nm pores in B. megaterium membranes and crosses into the cytosol, whereas in CHO-K1 cells, it causes significant membrane disturbance, allowing entry of molecules larger than 23 nm, and results in membrane budding and lipid redistribution, notably affecting mitochondria and nuclei.

## Solubility Information

Solubility	DMSO: 5 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	0.4054 mL	2.0268 mL	4.0537 mL
5 mM	0.0811 mL	0.4054 mL	0.8107 mL
10 mM	0.0405 mL	0.2027 mL	0.4054 mL
50 mM	0.0081 mL	0.0405 mL	0.0811 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Lee W, et al. Magainin 2 induces bacterial cell death showing apoptotic properties. *Curr Microbiol.* 2014 Dec;69(6): 794-801.

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