



Product Data Sheet

Product Name: Magainin 1
Catalog Number: AS-20791 (0.5 mg) Lot Number: See label on vial
AS-20792 (1 mg)
Sequence: 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 (3-letter code)
GIGKFLHSAGKFGKAFVGEIMKS (1-letter code)
Molecular Weight: 2409.9
% Peak Area by HPLC: ≥ 95
Appearance: Lyophilized white powder
Peptide Reconstitution: Magainin 1 peptide is freely soluble in H₂O.

Storage: Magainin 1 peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at -20°C or lower. Reconstituted peptide can be aliquoted and stored at -20°C or lower.

Description: Magainins are peptide antibiotics with antibacterial and antiparasitic activities, originally extracted from the skin of *Xenopus laevis*. Magainin 1 and 2 are closely related peptides of 23 amino acids each and differ by two substitutions. These antimicrobial peptides have broad-spectrum, non-specific activity against a wide range of micro-organisms, including viruses, gram-positive and gram-negative bacteria, protozoa, yeasts and fungi, and may also be hemolytic and cytotoxic to cancer cells. Magainin 1 is a bactericide. Both Magainin 1 and 2 exhibit inhibitory action toward Herpes simplex virus type 1 (HSV-1) and HSV-2. Ref: Williams, RW. et al. *Biophysical J.* **53**, 631A (1988); Morvan, A. et al. *Mol. Mar. Biol. Biotechnol.* **3**, 327 (1994); Matanic, A. et al. *Int. J. Antimicrob Agents* **23**, 382 (2004); Zasloff, M. *Proc. Natl. Acad. Sci.* **84**, 5449 (1987).

Additional Information: Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

Antimicrobial peptides cecropin A and B and magainin-1 were received from Anaspec (San Jose, CA). Capture solutions containing AMPs or antibodies diluted in PBS were injected into the PDMS channels and incubated overnight at 4°C. Concentrations of the recognition molecules in the capture solutions were as follows: Polymyxins B and E, 10 mg/ml; cecropins A, B and P, magainin-1, and parasin, 1 mg/ml; melittin and bactenecin, 250 µg/ml; control and target-specific antibodies, 10 µg/ml. After overnight incubation with the capture solutions, the channels were emptied and rinsed with PBS. The slides were then blocked for 30 min in 10 mg/ml gelatin in PBS, dried, and stored at 4°C for up to 2 weeks-[Kulagina, NV. et al. *Sens Actuators B Chem.* **121**, 150 \(2007\).](#)

Published Citations:

Kulagina, NV. et al. *Analytica. Chimica. Acta.* **575**, 9 (2006)
Maher, S. et al. *Biomed. Pharma.* **71**, 1289 (2006).
Kulagina, NV. et al. *Sens Actuators B Chem.* **121**, 150 (2007).

Related Products:

Name	Cat #	Size
Magainin 2	AS-20639	0.5 mg
(GIGKFLHSAKKFGKAFVGEIMNS)	AS-20640	1 mg

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