



Product Data Sheet

Product Name: Cecropin B
Catalog Number: AS-24011 (0.5 mg) **Lot Number:** See label on vial

Sequence: H-Lys-Trp-Lys-Val-Phe-Lys-Lys-Ile-Glu-Lys-Met-Gly-Arg-Asn-Ile-Arg-Asn-Gly-Ile-Val-Lys-Ala-Gly-Pro-Ala-Ile-Ala-Val-Leu-Gly-Glu-Ala-Lys-Ala-Leu-NH₂ (3-letter code)
KWKVFKKIEKMGRNIRNGIVKAGPAIAVLGEAKAL-NH₂ (1-letter code)

Molecular Weight: 3835.7
% Peak Area by HPLC: ≥ 95
Appearance: Lyophilized white powder

Peptide Reconstitution: Cecropin B peptide is freely soluble in H₂O.

Storage: Cecropin B 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: Cecropin B is a small antibacterial peptide from the giant silkworm, *Hyalophora cecropia*. Antimicrobial peptides are essential to innate host defense as effectors of pathogen clearance and can affect host cell to promote wound repair. Ref: Vaara, M. et al. *Antimicrob. Agents Chemo.* **38**, 2498 (1994); Florack, D. et al. *Transgenic Res.* **4**, 132 (1995); Lee, P. et al. *Wound Repair Regen.* **12**, 351 (2004).

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 \(2007\).](#)

Cecropin B (Anaspec, San Jose, CA) and PTH(1–34) (Bachem Torrance, CA) were labeled with Alexa Fluor 350 carboxylic acid, succinimidyl ester (Molecular Probes, Eugene, OR) and Alexa Fluor 488 carboxylic acid, succinimidyl ester (Molecular Probes), respectively, to enable measurement of the released amounts. In brief, CAP and PF-127 polymer blend (7:3 ratio fraction of CAP to PF-127) was dissolved in acetone. Phosphate-buffered saline (PBS), pH 7.4, containing CB (250 or 500 µg/ml), PTH(1–34) (50 or 100 µg/ml), or Sim (420 or 840 µg/ml) was added to the polymer solution, homogenized into corn oil, and then sonicated for 20 s-[Jeon, JH. and PA. *David Biomaterials* **29**, 3591 \(2008\).](#)

Published Citations:

Kulagina, NV. et al. *Sens Actuators B Chem.* **121**, 150 (2007).
Kulagina, NV. et al. *Sensors* **7**, 2808 (2007).
Jeon, JH. and PA. David *Biomaterials* **29**, 3591 (2008).

Related Products:

Name	Cat #	Size
Cecropin A	AS-24009	0.5 mg
(KWKLFFKKIEKVGQNIRDGIIKAGPAVAVVGGATQIAK-NH2)	AS-24010	1 mg

For Research Use Only