

PRODUCT INFORMATION

Cecropin A (trifluoroacetate salt)

Item No. 36901

Formal Name:	L-lysyl-L-tryptophyl-L-lysyl-L-leucyl-L-phenylalanyl-L-lysyl-L-lysyl-L-isoleucyl-L- α -glutamyl-L-lysyl-L-valylglycyl-L-glutaminy-L-asparaginy-L-isoleucyl-L-arginyl-L- α -aspartylglycyl-L-isoleucyl-L-isoleucyl-L-lysyl-L-alanylglycyl-L-prolyl-L-alanyl-L-valyl-L-alanyl-L-valyl-L-valylglycyl-L-glutaminy-L-alanyl-L-threonyl-L-glutaminy-L-isoleucyl-L-alanyl-L-lysineamide, trifluoroacetate salt	H—Lys—Trp—Lys—Leu—Phe—Lys—Lys—Ile—Glu—Lys—Val—Gly—Gln—Asn—Ile—Arg—Asp—Gly—Ile—Ile—Lys—Ala—Gly—Pro—Ala—Val—Ala—Val—Val—Gly—Gln—Ala—Thr—Gln—Ile—Ala—Lys—NH ₂
MF:	C ₁₈₄ H ₃₁₃ N ₅₃ O ₄₆ • XCF ₃ COOH	• XCF ₃ COOH
FW:	4003.8	

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

Cecropin A (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the cecropin A (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

Cecropin A is an antimicrobial peptide that has been found in *H. cecropia*.^{1,2} It induces apoptosis in *C. albicans* when used at a concentration of 5 μ M.² Cecropin A is active against the planktonic and uropathogenic *E. coli* strain CFT073 (MIC = 100 μ g/ml) and increases survival of CFT073-infected *G. mellonella* larvae.¹ Cecropin A (15 mg/kg) decreases enrichment of the gut microflora *Bacteroidaceae* and *Enterobacteriaceae* and increases gut levels of *Lactobacillus*, as well as increases survival and decreases body weight loss in a mouse model of inflammatory bowel disease (IBD) induced by dextran sulfate (DSS; Item No. 23250).³

References

1. Kalsy, M., Tonk, M., Hardt, M., *et al.* The insect antimicrobial peptide cecropin A disrupts uropathogenic *Escherichia coli* biofilms. *NPJ Biofilms Microbiomes* **6**(1), 6 (2020).
2. Yun, J. and Lee, D.G. Cecropin A-induced apoptosis is regulated by ion balance and glutathione antioxidant system in *Candida albicans*. *IUBMB Life* **68**(8), 652-662 (2016).
3. Zhai, Z., Zhang, F., Cao, R., *et al.* Cecropin A alleviates inflammation through modulating the gut microbiota of C57BL/6 mice with DSS-induced IBD. *Front. Microbiol.* **10**, 1595 (2019).

WARNING

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

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/21/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM