

PRODUCT INFORMATION



LL-37 (18-37) (human) (trifluoroacetate salt)

Item No. 36950

Formal Name: L-lysyl-L-arginyl-L-isoleucyl-L-valyl-L-glutamyl-L-arginyl-L-isoleucyl-L-lysyl-L- α -aspartyl-L-phenylalanyl-L-leucyl-L-arginyl-L-asparaginyl-L-leucyl-L-valyl-L-prolyl-L-arginyl-L-threonyl-L- α -glutamyl-L-serine, trifluoroacetate salt

Synonyms: Cathelicidin, CAP-18, FALL-39, hCAP-18, KR-20

Peptide Sequence: KRIVQRIKDFLRNLVPRTES-OH

MF: $C_{109}H_{190}N_{36}O_{29} \cdot XCF_3COOH$

FW: 2,468.9

Purity: $\geq 98\%$

Supplied as: A solid

Storage: $-20^\circ C$

Stability: ≥ 4 years

H-Lys-Arg-Ile-Val-Gln-Arg-Ile-Lys-Asp-Phe-

Leu-Arg-Asn-Leu-Val-Pro-Arg-Thr-Glu-Ser-OH

• XCF_3COOH

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

LL-37 (18-37) (human) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the LL-37 (18-37) (human) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. LL-37 (18-37) (human) (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of LL-37 (18-37) (human) (trifluoroacetate salt) in these solvents is approximately 1, 20, and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of LL-37 (18-37) (human) (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of LL-37 (18-37) (human) (trifluoroacetate salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

LL-37 (18-37) is an antimicrobial peptide fragment of LL-37 (Item No. 24461).^{1,2} It is active against *S. aureus* and *C. albicans* with minimum lethal concentrations of 4 and 10 μM , respectively.² It also inhibits the growth of *E. histolytica* trophozoites when used at concentrations ranging from 10 to 50 μM .¹

References

1. Rico-Mata, R., De Leon-Rodriguez, L.M., and Avila, E.E. Effect of antimicrobial peptides derived from human cathelicidin LL-37 on *Entamoeba histolytica* trophozoites. *Exp. Parasitol.* **133(3)**, 300-306 (2013).
2. Murakami, M., Lopez-Garcia, B., Braff, M., et al. Postsecretory processing generates multiple cathelicidins for enhanced topical antimicrobial defense. *J. Immunol.* **172(5)**, 3070-3077 (2004).

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.

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