

PRODUCT INFORMATION



OP-145 (trifluoroacetate salt)

Item No. 38841

Formal Name: N-acetyl-L-isoleucylglycyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-lysyl-L-arginyl-L-isoleucyl-L-valyl-L- α -glutamyl-L-arginyl-L-isoleucyl-L-lysyl-L-arginyl-L-phenylalanyl-L-leucyl-L-arginyl-L- α -glutamyl-L-leucyl-L-valyl-L-arginyl-L-prolyl-L-leucyl-L-argininamide, trifluoroacetate salt

Synonyms: acetyl-IGKEFKRIVERIKRFLRELVRPLR-amide, P60.4-Ac

Peptide Sequence: Ac-IGKEFKRIVERIKRFLRELVRPLR-NH₂

MF: C₁₄₂H₂₄₆N₄₆O₃₁ • XCF₃COOH

FW: 3,093.8

Purity: \geq 95%

Supplied as: A solid

Storage: -20°C

Stability: \geq 4 years

Ac—Ile—Gly—Lys—Glu—Phe—Lys—Arg—Ile—Val—Glu—

Arg—Ile—Lys—Arg—Phe—Leu—Arg—Glu—Leu—Val—

Arg—Pro—Leu—Arg—NH₂

• XCF₃COOH

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

Laboratory Procedures

OP-145 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the OP-145 (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

OP-145 is a synthetic antimicrobial peptide and derivative of the antimicrobial peptide LL-37 (Item No. 24461).¹ It is active against *E. coli*, *P. aeruginosa*, *C. albicans*, and *A. niger* (MICs = 2, 3, 6, and 18 μ M, respectively). Poly(lactic-co-glycolic acid) (PLGA) microspheres containing OP-145 prevent biofilm formation in a mouse model of bone infection induced by surgical femoral fracture followed by bacterial inoculation at the fracture site.²

References

1. Nell, M.J., Tjabringa, G.S., Wafelman, A.R., *et al.* Development of novel LL-37 derived antimicrobial peptides with LPS and LTA neutralizing and antimicrobial activities for therapeutic application. *Peptides* **27(4)**, 649-660 (2006).
2. Cheng, Y., Qin, J., Huang, Y., *et al.* The antimicrobial effects of PLGA microspheres containing the antimicrobial peptide OP-145 on clinically isolated pathogens in bone infections. *Sci. Rep.* **12(1)**, 14541 (2022).

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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