

PRODUCT INFORMATION



BING (trifluoroacetate salt)

Item No. 36959

Formal Name: L-isoleucyl-L-arginyl-L-isoleucyl-L-isoleucyl-L-leucyl-L-arginyl-L-alanyl-L-glutaminyglycyl-L-alanyl-L-leucyl-L-lysyl-L-isoleucine, trifluoroacetate salt

Synonym: Blocker of Inter-membrane Stress Responses of Gram-negative Bacteria

Peptide Sequence: IRIILRAQGALKI-OH

MF: C₆₇H₁₂₅N₂₁O₁₅ • XCF₃COOH

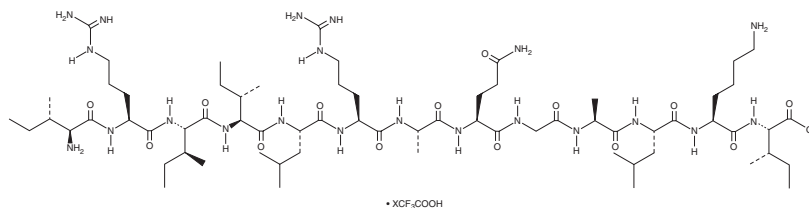
FW: 1,464.8

Purity: ≥85%

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

BING (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the BING (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. BING (trifluoroacetate salt) is slightly soluble in dimethyl formamide and DMSO.

Description

BING is an antimicrobial peptide that has been found in Japanese medaka fish (*O. latipes*) and is derived from vacuolar protein sorting-associated protein 13D-like (Vps13D).¹ It is active against various Gram-negative and Gram-positive bacteria, including methicillin-resistant *S. aureus* (MRSA; MICs = 4-64 µg/ml). BING is synergistic with the antibiotics ampicillin (Item Nos. 14417 | 35740), amoxicillin (Item No. 19188), and novobiocin (Item No. 18457) against *P. aeruginosa* and suppresses the development of resistance to kanamycin and ampicillin in *E. coli*. *In vivo*, BING increases the survival rate of *O. latipes* infected with *E. tarda*.

Reference

1. Dong, M., Kwok, S.H., Humble, J.L., *et al.* BING, a novel antimicrobial peptide isolated from Japanese medaka plasma, targets bacterial envelope stress response by suppressing *cpvR* expression. *Sci. Rep.* **11**(1), 12219 (2021).

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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