

# PRODUCT INFORMATION



## AMPR-22 (trifluoroacetate salt)

Item No. 36954

<b>Formal Name:</b>	L-lysyl-L-lysyl-L-methionyl-L-methionyl-L-lysyl-L-lysylglycylglycyl-L-lysyl-L-phenylalanyl-glycyl-L-threonyl-L-phenylalanyl-L-methionyl-L-arginine, trifluoroacetate salt	H-Lys-Lys-Met-Met-Lys-Lys-Gly-Gly-Lys-Phe-Gly-Thr-Phe-Met-Ala-Ile-Gly-Gly-Ile-Arg-OH
<b>Synonym:</b>	KKMMKKGGKFGTFMAIGGIR	
<b>MF:</b>	$C_{98}H_{168}N_{28}O_{22}S_3 \cdot XCF_3COOH$	
<b>FW:</b>	2,186.8	• $XCF_3COOH$
<b>Purity:</b>	≥95%	
<b>Supplied as:</b>	A solid	
<b>Storage:</b>	-20°C	
<b>Stability:</b>	≥4 years	

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

### Laboratory Procedures

AMPR-22 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the AMPR-22 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. AMPR-22 (trifluoroacetate salt) is soluble in the organic solvent DMSO at a concentration of approximately 11 mg/ml. AMPR-22 (trifluoroacetate salt) is slightly soluble in dimethyl formamide.

### Description

AMPR-22 is a synthetic antimicrobial peptide derived from the mitochondrial cation channel reactive oxygen species (ROS) modulator 1 (Romo1).<sup>1</sup> It is active against *S. aureus*, methicillin-resistant *S. aureus* (MRSA), *P. aeruginosa*, and carbapenem-resistant *P. aeruginosa* with minimum bactericidal concentration (MBC) values of 2, 2, 2, and 4 µg/ml, respectively. AMPR-22 induces bacterial outer membrane permeability and ATP leakage to the extracellular space in *S. aureus* and *P. aeruginosa* in a concentration-dependent manner. It increases survival in a mouse model of sepsis induced by *S. aureus* when administered at a dose of 10 mg/kg.

### Reference

1. You, D.-G., Lee, H.-R., Kim, H.-K., *et al.* A novel peptide derived from the transmembrane domain of Romo1 is a promising candidate for sepsis treatment and multidrug-resistant bacteria. *Int. J. Mol. Sci.* **22(15)**, 8243 (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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