# PRODUCT INFORMATION



## BMAP 28 (bovine) (trifluoroacetate salt)

Item No. 36960

Formal Name: glycylglycyl-L-leucyl-L-arginyl-L-seryl-L-

> leucylglycyl-L-arginyl-L-lysyl-L-isoleucyl-L-leucyl-L-arginyl-L-alanyl-L-tryptophyl-L-lysyl-L-lysyl-L-tyrosylglycyl-L-prolyl-L-isoleucyl-L-isoleucyl-L-valyl-L-prolyl-L-isoleucyl-L-isoleucyl-L-arginyl-L-

isoleucinamide, trifluoroacetate salt

Synonyms: Bovine Myeloid Antimicrobial Peptide 28,

Cathelicidin-5 (132-158)

Peptide Sequence: GGLRSLGRKILRAWKKYGPIIVPIIRI-NH<sub>2</sub>

 $C_{145}H_{250}N_{44}O_{29} \bullet XCF_3COOH$ MF:

FW: 3.073.8 **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 vears

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

H-Gly-Gly-Leu-Arg-Ser-Leu-Gly-Arg-Lys-Ile-

#### **Laboratory Procedures**

BMAP 28 (bovine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the BMAP 28 (bovine) (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

### Description

Bovine myeloid antimicrobial peptide (BMAP) 28 is a synthetic antimicrobial peptide that corresponds to amino acids 132-158 of bovine cathelicidin-5.1 It is active against the bacteria E. coli, S. aureus, methicillinresistant S. aureus (MRSA), and S. epidermidis and the fungus C. albicans (MICs = 2, 2, 4, 1, and 8 μM, respectively). BMAP 28 induces inner membrane permeabilization in E. coli when used at a concentration of 200 nM. It reduces viral replication of herpes simplex virus 1 (HSV-1) in Vero 76-infected cells when used at a concentration of 5 μM.<sup>2</sup> It induces hemolysis of isolated human erythrocytes and is cytotoxic to isolated human neutrophils when used at a concentration of 30 μM.<sup>1</sup> BMAP 28 (0.8 mg/kg) increases survival in E. coli- or MRSA-infected mice but not P. aeruginosa-infected mice.<sup>2</sup>

#### References

- 1. Skerlavaj, B., Gennaro, R., Bagella, L., et al. Biological characterization of two novel cathelicidin-derived peptides and identification of structural requirements for their antimicrobial and cell lytic activities. J. Biol. Chem. 271(45), 28375-28381 (1996).
- 2. Benincasa, M., Skerlavaj, B., Gennaro, R., et al. In vitro and in vivo antimicrobial activity of two α-helical cathelicidin peptides and of their synthetic analogs. Peptides 24(11), 1723-1731 (2003).

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

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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