

## BD-3 Protein, Mouse

Cat. No.:	HY-P7138
Synonyms:	rMuBD-3; DEFB-3; HBD3; Beta-defensin 103
Species:	Mouse
Source:	E. coli
Accession:	Q9WTL0 (K23-K63)
Gene ID:	27358
Molecular Weight:	Approximately 10.06 kDa

### PROPERTIES

AA Sequence	K K I N N P V S C L    R K G G R C W N R C    I G N T R Q I G S C    G V P F L K C C K R K
Biological Activity	Measured by its anti-microbial activity against E. coli. The ED <sub>50</sub> this effect is 387.3 ng/mL, corresponding to a specific activity is 2.58×10 <sup>3</sup> U/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 40 mM PB, 300 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	Recombinant Mouse Beta Defensin-3 peptide, produced from a baculovirus expression system, shows antimicrobial activity against <i>P. aeruginosa</i> PAO1 (MIC of 8 μg/mL) and <i>Escherichia coli</i> D31 (MIC of 16 μg/mL) in a salt-dependent manner <sup>[1]</sup> . Mouse Beta Defensin-3 peptide exhibits broad-spectrum antimicrobial activity, this peptide may serve as an innate defense against microbial invasion at specific mucosal surfaces in the mouse <sup>[2]</sup> .
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### REFERENCES

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[1]. Bals R, et al. Mouse beta-defensin 3 is an inducible antimicrobial peptide expressed in the epithelia of multiple organs. *Infect Immun*. 1999 Jul;67(7):3542-7.

[2]. Burd RS, et al. Murine beta-defensin-3 is an inducible peptide with limited tissue expression and broad-spectrum antimicrobial activity. *Shock*. 2002 Nov;18(5):461-4.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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