

Rev03
 Update: Dec,14,2021

DATASHEET

BD-1, Rat

Cat. No.: Z02946

Product Introduction

Species	Rat
Protein Construction	BD-1 (Asp33-Ser69) Accession # O89117
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 1 EU/μg of protein by LAL method
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using CD34 ⁺ dendritic cells is in a concentration range of 100.0-1000.0 ng/ml.
Expression System	E. coli
Theoretical Molecular Weight	4.1 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in 20 mM PBS, 500 mM NaCl, pH 7.0.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target Background : Defensin are 3-4 kDa antimicrobial peptides of which three distinct families have been identified; α-defensin, β-defensins, and insect defensins. Rat β-Defensin 1, as a member of the β-defensin family, is a salt-sensitive antimicrobial peptide present in epithelia of the lung and urogenital tract. The predicted amino acid sequence shows the hallmark features of other known epithelial β-defensins, including the ordered array of six cysteine residues.

Synonyms : rBD-1; Defensin, beta 1; Defb1; Beta-defensin 1; Defensin beta 1

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.