

Beta Defensin-3 Rat Recombinant

Item Number	rAP-0351
Synonyms	Beta-defensin 3, BD-3, Defensin beta 3, Defb3.
Description	BD-3 Rat Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 41 amino acids and having a molecular mass of 4.5kDa. The BD-3 is purified by proprietary chromatographic techniques.
Uniprot Accession Number	Q32ZI4
Amino Acid Sequence	KKVYNAVSCM TNGGICWLKC SGTFREIGSC GTRQLKCCKK K.
Source	Escherichia Coli.
Physical Appearance and Stability	Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized BD-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BD-3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Formulation and Purity	BD-3 protein was lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4. Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Application	
Solubility	It is recommended to reconstitute the lyophilized BD-3 in sterile 18M-cm H ₂ O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	Measured by its antimicrobial activity against E. coli. The ED ₅₀ for this effect is typically 4-20µg/ml, corresponding to a specific activity of 50,000-250,000 units/mg.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**