

Recombinant Protein Technical Manual Recombinant Human β-Defensin 1/DEFB1 Protein

RPES3487

	Data:	
 To Yol		

Product SKU: RPES3487

Species: Human

**Size:** 10µg

Expression host: E. coli

**Uniprot:** P60022

Protein	Inforn	nation

Molecular Mass:	5.1 kDa	
AP Molecular Mass:	6 kDa	
Tag:		
Bio-activity:		
Purity:	> 95 % as determined by reducing SDS-PAGE.	
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.	
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.	
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.	
Formulation:	Lyophilized from a 0.2 $\mu m$ filtered solution of 20mM PB, 130mM NaCl, pH 7.4.	
Reconstitution:	Please refer to the printed manual for detailed information.	
Application:		
Synonyms:	Beta-Defensin 1; BD; hBD; Defensin Beta 1; DEFB1; BD1; HBD1	

## Sequence: Gly22-Lys68

## Background:

 $\beta$ -Defensin 1 (DEFB1) is a member of the  $\beta$ -defensin family, which is highly expressed by epithelial cells.  $\beta$ defensins are expressed as the C-terminal portion of precursors and are released by proteolytic cleavage of a signal peptide.  $\beta$ -defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds.  $\beta$ -defensin 1 is an antimicrobial peptide implicated in the resistance of epithelial surfaces to microbial colonization. Defects in  $\beta$ -Defensin contribute to asthma diagnosis, with apparent gender-specific effects in human.  $\beta$ -defensin 1 may also play a role in the pathogenesis of severe sepsis. In addition,  $\beta$ -defensin 1 is associated with induction profiles in gingival keratinocytes.