# Recombinant Human β-Defensin 1/DEFB1 Protein

**Catalog Number: PKSH033264**

**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

## Description

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|---|---|
| **Species** | Human |
| **Source** | E.coli-derived Human β-Defensin 1/DEFB1 protein Gly22-Lys68 |
| **Calculated MW** | 5.1 kDa |
| **Observed MW** | 6 kDa |
| **Accession** | P60022 |
| **Bio-activity** | Not validated for activity |

## Properties

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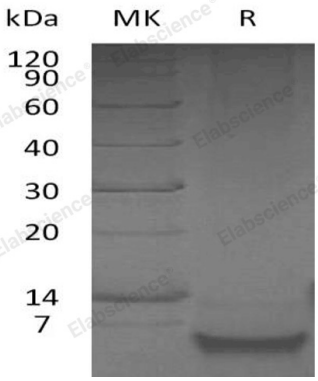
|---|---|
| **Purity** | > 95 % as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 1.0 EU per μg of the protein as determined by the LAL method. |
| **Storage** | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months. |
| **Shipping** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 20mM PB, 130mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| **Reconstitution** | Please refer to the printed manual for detailed information. |

## Data




> 95 % as determined by reducing SDS-PAGE.

## Background

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