

## Recombinant Human DEFB1 Protein(Sumo Tag)

**Catalog Number:** PDEH100507

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

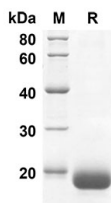
### Description

|                      |   |
|----------------------|---|
| <b>Species</b>       | Human   |
| <b>Source</b>        | E.coli-derived Human DEFB1 protein Asp33-Lys68, with an N-terminal Sumo |
| <b>Calculated MW</b> | 16.8 kDa  |
| <b>Observed MW</b>   | 18 kDa  |
| <b>Accession</b>     | P60022  |
| <b>Bio-activity</b>  | Not validated for activity  |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 90% as determined by reducing SDS-PAGE.  |
| <b>Endotoxin</b>      | < 10 EU/mg of the protein as determined by the LAL method  |
| <b>Storage</b>        | Generally, 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. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.  |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.  |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.   |

### Data



SDS-PAGE analysis of Human DEFB1 proteins, 2 µg/lane of Recombinant Human DEFB1 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 16.8 KD

### Background

### For Research Use Only

Toll-free: 1-888-852-8623  
Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086  
Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017

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The DEFB1 gene, encoding for the constitutively expressed human beta-defensin 1 (hBD1) antimicrobial peptide is a potential candidate when studying genetic susceptibility to caries. DEFB1 genetic variations have been reported as contributing to hBD1 production impairment, leading to a greater susceptibility to be infected by oral pathogens, also leading to periodontitis. To counteract host immunity, *Cryptosporidium parvum* has evolved multiple strategies to suppress host antimicrobial defense. One such strategy is to reduce the production of the antimicrobial peptide beta-defensin 1 (DEFB1) by host epithelial cells. Beta-Defensin-1, an antimicrobial peptide encoded by the DEFB1 gene, is known to play an important role in lung mucosal immunity.