

## Recombinant Human DEFB1 Protein(Sumo Tag)

Catalog Number: PDEH100507

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

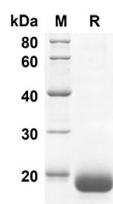
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human DEFB1 protein Asp33-Lys68, with an N-terminal Sumo
<b>Mol_Mass</b>	16.8 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

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.

### For Research Use Only