Recombinant Human DEFB1 Protein(Sumo Tag)

Catalog Number: PDEH100507

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

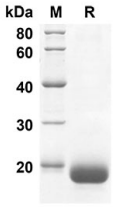
Description

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

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	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.