

## Recombinant Human $\beta$ -Defensin 4A/DEFB4A Protein

Catalog Number: PKSH033266

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

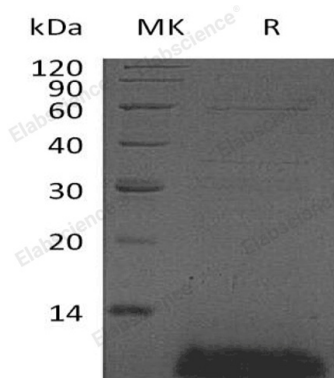
### Description

Species	Human
Source	E.coli-derived Human $\beta$ -Defensin 4A/DEFB4A protein Gly24-Pro64
Calculated MW	4.3 kDa
Observed MW	9 kDa
Accession	O15263
Bio-activity	Not validated for activity

### Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per $\mu$ g 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 °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 PBS, 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

$\beta$ -Defensin 4A is a membrane-active cationic peptide that functions in inflammation and innate immune responses. There are at least 30  $\beta$ -Defensins, which are distinguished from  $\alpha$ -Defensins by the connectivity pattern of their three intermolecular disulfide bonds. Members of the Defensin family are highly similar in protein sequence. This gene encodes Defensin, DEFB4, which has broad-spectrum antimicrobial activity and may play an important role in innate epithelial defense. They are highly expressed in skin and tonsils, and to a lesser extent in trachea, uterus, kidney, thymus, adenoid, pharynx and tongue.  $\beta$ -Defensin 4A has low expression in salivary gland, bone marrow, colon, stomach, polyp and larynx. No expression in small intestine. The 45 amino acid mature human BD3 shares 38% and 33% amino acid sequence identity with mouse and rat BD3, respectively.

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