

## Recombinant Human SPINK4 Protein (His Tag)

Catalog Number: PKSH033357

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

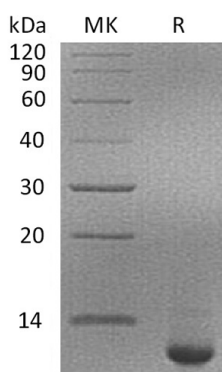
### Description

Species	Human
Source	HEK293 Cells-derived Human SPINK4 protein Gly27-Cys86, with an C-terminal His
Calculated MW	7.7 kDa
Observed MW	10-13 kDa
Accession	O60575
Bio-activity	Not validated for activity

### Properties

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 °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 µm filtered solution of PBS, 1mM EDTA, 5% Trehalose, 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

Serine Protease Inhibitor Kazal-Type 4 (SPINK4) is a secreted protein containing one Kazal-like domain. SPINK4 is a member of the SPINK protein family. The gene family of serine protease inhibitors of the Kazal type (SPINK) are functional and positional candidate genes for celiac disease (CD). SPINK1 plays an important role in protecting the pancreas against excessive trypsinogen activation. It is a potent natural inhibitor of pancreatic trypsin activity. SPINK1 mutations are associated with the development of acute and chronic pancreatitis and have been detected in all forms of chronic pancreatitis. SPINK2 functions as a trypsin/acrosin inhibitor and is synthesized mainly in the testis and seminal vesicle where its activity is engaged in fertility. The SPINK2 protein contains a typical Kazal domain composed by six cysteine residues forming three disulfide bridges. SPINK9 was identified in human skin. Its expression was strong in palmar epidermis; but not detectable or very low in non palmoplantar skin.