# Recombinant Protein Technical Manual

## Recombinant Human SPINK4 Protein (His Tag)

**RPES0348**

## Product Data:

**Product SKU:** RPES0348

**Size:** 10µg

**Species**: Human

**Expression host:** HEK293 Cells

**Uniprot:** NP_055286.1

## Protein Information:

**Molecular Mass:** 8 kDa

**AP Molecular Mass:** 10 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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℃ 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 sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Serine Protease Inhibitor Kazal-Type 4; Peptide PEC-60 Homolog; SPINK4;HEL136;MGC133107;PEC-60;PEC60

## Immunogen Information:

**Sequence:** Met 1-Cys 86

## Background:

Serine protease inhibitor Kazal-type 4, also known as Peptide PEC-60 homolog and SPINK4, is a secreted protein which contains 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.