



# Recombinant Protein Technical Manual

## Recombinant Mouse Trypsin 2/PRSS2 Protein (His Tag)(Active)

RPES2599

### Product Data:

**Product SKU:** RPES2599

**Size:** 10µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_033456.1

### Protein Information:

**Molecular Mass:** 26.2 kDa

**AP Molecular Mass:** 32 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH<sub>2</sub> (Anaspec, Catalog #27096). The specific activity is >1500 pmoles/min/µg. (Activation description: The proenzyme needs to be activated by enteropeptidase for a

**Purity:** > 92 % as determined by 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°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 sterile PBS, pH 7.5

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

**Application:**

**Synonyms:** Prss2;Ta;Tesp4;Try2;TRY8;TRYP

## Immunogen Information:

**Sequence:** Met 1-Asn 246

## Background:

Trypsin-2, also known as Trypsin II, Anionic trypsinogen, Serine protease 2, PRSS2 and TRY2, is a secreted protein which belongs to the trypsin serine protease family including Trypsin, PRSS1, PRSS2 and PRSS3. It consists of a signal peptide (residues 15), a pro region (residues 16-23), and a proteolytically active mature chain (residues 24-247). PRSS2 contains one peptidase S1 domain. It is secreted into the duodenum, hydrolysing peptides into their smaller building blocks, which is necessary for the uptake of protein in the food. It is secreted by the pancreas in the form of inactive zymogen, trypsinogen and cleaved to its active form in the small intestine when the pancreas is stimulated by cholecystokinin through the common activation mechanism.