



## Recombinant Protein Technical Manual

**Recombinant Human Pancreasin/Marapsin/PRSS27  
Protein (His Tag)(Active)**  
RPES3579

### Product Data:

**Product SKU:** RPES3579

**Size:** 10µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** Q9BQR3

### Protein Information:

**Molecular Mass:** 30.9 kDa

**AP Molecular Mass:** 42 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to cleave a colorimetric peptide substrate, NcarbobenzyloxyGlyArgThioBenzyl ester (ZGR-SBzl), in the presence of 5,5'Dithiobis (2-nitrobenzoic acid) (DTNB). The specific activity is > 2000 pmols/min/µg.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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 7.4

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

**Application:**

**Synonyms:** CAPH2;MPN;UNQ1884/PRO4327

## Immunogen Information:

**Sequence:** Met 1-Lys 290

## Background:

The name "Pancreasin" because it is transcribed strongly in the pancreas. This secreted, tryptic serine protease, also known as Marapsin or PRSS27 (Protease, serine, 27), which is a member of the peptidase S1 family. Pancreasin is inhibited by benzamidine and leupeptin but resists several classic inhibitors of trypsin. Marapsin was constitutively expressed in nonkeratinizing stratified squamous epithelia of human esophagus, tonsil, cervix, larynx, and cornea. In fact, marapsin was the second most strongly up-regulated protease in psoriatic lesions, where expression was localized to the upper region of the hyperplastic epidermis. Similarly, in the hyperproliferative epithelium of regenerating murine skin wounds, marapsin localized to the suprabasal layers, where keratinocytes undergo squamous differentiation. Marapsin's restricted expression, localization, and cytokine-inducible expression suggest a role in the terminal differentiation of keratinocytes in hyperproliferating squamous epithelia.