



Recombinant Protein Technical Manual  
Recombinant Human SerpinB6/PI-6 Protein (His Tag)  
RPES1833

### Product Data:

**Product SKU:** RPES1833

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** AAB30320.1

### Protein Information:

**Molecular Mass:** 44.9 kDa

**AP Molecular Mass:** 43 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 90 % 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:** Serpin B6; Cytoplasmic Antiproteinase; CAP; Peptidase Inhibitor 6; PI-6; Placental Thrombin Inhibitor; SERPINB6; PI6; PTI;PI-6;PTI;RP1-90J20.6;SPI3

## Immunogen Information:

**Sequence:** Asp 2-Pro 376

## Background:

SerpinB6, also known as Cytoplasmic antiproteinase, Peptidase inhibitor 6, Placental thrombin inhibitor, SERPINB6 and PI-6, is a cytoplasm protein which belongs to the serpin family and Ov-serpin subfamily. SerpinB6 / PI-6 is an inhibitor of cathepsin G, kallikrein-8 and thrombin. It may play an important role in the inner ear in the protection against leakage of lysosomal content during stress and loss of this protection results in cell death and sensorineural hearing loss. SerpinB6 / PI-6 is expressed in keratinocytes (at protein level). It is also found in placenta, cardiac muscle, lung, liver, kidney and pancreas. SerpinB6 / PI-6 is expressed in the inner ear hair cells. It expressed abundantly by normal mast cells in different tissues and by mast cells in mastocytoma lesions. SerpinB6 / PI-6 may be involved in the regulation of serine proteinases present in the brain or extravasated from the blood. Defects in SerpinB6 are the cause of deafness autosomal recessive type 91 which is a form of non-syndromic deafness characterized by progressive and age-dependent sensorineural hearing loss. Vestibular function is normal.