

**HUMAN TPSAB1 PROTEIN, HIS TAG****Cat.#:** 11558**Product Name:** Human TPSAB1 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** Tryptase-1;Tryptase I;Tryptase alpha-1**Target:** TPSAB1**UNIPROT ID:** Q15661**Description:** Recombinant human TPSAB1 Protein with C-terminal 6xHis tag

**Background:** Tryptases comprise a family of trypsin-like serine proteases, the peptidase family S1. Tryptases are enzymatically active only as heparin-stabilized tetramers, and they are resistant to all known endogenous proteinase inhibitors. Several tryptase genes are clustered on chromosome 16p13.3. These genes are characterized by several distinct features. They have a highly conserved 3' UTR and contain tandem repeat sequences at the 5' flank and 3' UTR which are thought to play a role in regulation of the mRNA stability. These genes have an intron immediately upstream of the initiator Met codon, which separates the site of transcription initiation from protein coding sequence. This feature is characteristic of tryptases but is unusual in other genes. The alleles of this gene exhibit an unusual amount of sequence variation, such that the alleles were once thought to represent two separate genes, alpha and beta 1. Beta tryptases appear to be the main isoenzymes expressed in mast cells; whereas in basophils, alpha tryptases predominate. Tryptases have been implicated as mediators in the pathogenesis of asthma and other allergic and inflammatory disorders. [provided by RefSeq, Jul 2008]

**Species/Host:** HEK293**Molecular Weight:** The protein has a predicted molecular mass of 29.6 kDa after removal of the signal peptide. The apparent molecular mass of TPSAB1-His is approximately 35-40 kDa due to glycosylation.**Molecular Characterization:** TPSAB1(Ala19-Pro275) 6xHis tag**Purity:** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$  for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at  $-80^{\circ}\text{C}$  (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

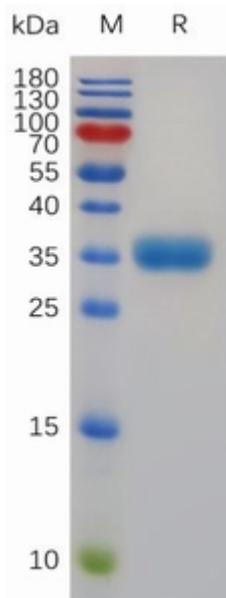


Figure 1. Human TPSAB1 Protein, His Tag on SDS-PAGE under reducing condition.