

**TPSAB1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12270b**

**Specification**

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**TPSAB1 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q15661</a>
Other Accession	<a href="#">P20231</a> , <a href="#">NP_003285</a>
Reactivity	Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30515
Antigen Region	249-275

**TPSAB1 Antibody (C-term) - Additional Information**

**Gene ID** 7177

**Other Names**

Tryptase alpha/beta-1, Tryptase-1, Tryptase I, Tryptase alpha-1, TPSAB1, TPS1, TPS2, TPSB1

**Target/Specificity**

This TPSAB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 249-275 amino acids from the C-terminal region of human TPSAB1.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

TPSAB1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**TPSAB1 Antibody (C-term) - Protein Information**

**Name** TPSAB1

**Synonyms** TPS1, TPS2, TPSB1

**Function** Trypsase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type. May play a role in innate immunity. Isoform 2 cleaves large substrates, such as fibronectin, more efficiently than isoform 1, but seems less efficient toward small substrates (PubMed:[18854315](#)).

#### **Cellular Location**

Secreted. Note=Released from the secretory granules upon mast cell activation.

#### **Tissue Location**

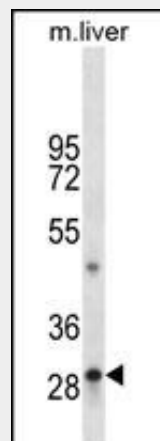
Isoform 1 and isoform 2 are expressed in lung, stomach, spleen, heart and skin; in these tissues, isoform 1 is predominant. Isoform 2 is expressed in aorta, spleen, and breast tumor, with highest levels in the endothelial cells of some blood vessels surrounding the aorta, as well as those surrounding the tumor and low levels, if any, in mast cells (at protein level)

### **TPSAB1 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **TPSAB1 Antibody (C-term) - Images**



TPSAB1 Antibody (C-term) (Cat. #AP12270b) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the TPSAB1 antibody detected the TPSAB1 protein (arrow).

### **TPSAB1 Antibody (C-term) - 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.

#### **TPSAB1 Antibody (C-term) - References**

- Lee, J.W., et al. Dig. Dis. Sci. 55(10):2922-2928(2010)  
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Radhakrishnan, Y., et al. Biol. Reprod. 81(4):647-656(2009)  
Schiemann, F., et al. J. Immunol. 183(4):2223-2231(2009)  
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