

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

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12270b

## **Specification**

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

Application WB,E
Primary Accession O15661

Other Accession P20231, NP 003285

Reactivity
Predicted
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Human
Rabbit
Polyclonal
Rabbit IgG
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

E~~Use at an assay dependent concentration.

### **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** Tryptase 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**

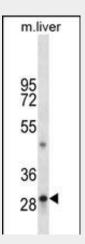
Isoform 1 and isoform 2 are expressed in lung, stomach, spleen, heart and skin; in these tissues, isoform 1 is predominant. Isoform 2 is expressed in aorta, spleen, and breast tumor, with highest levels in the endothelial cells of some blood vessels surrounding the aorta, as well as those surrounding 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- 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

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