10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TPSAB1 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP12270b

Specification

TPSAB1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q15661

TPSAB1 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 7177

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TPSAB1 Antibody (C-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- Blocking Peptides

TPSAB1 Antibody (C-term) Blocking peptide - Images

TPSAB1 Antibody (C-term) Blocking peptide - Background

Tryptases comprise a family of trypsin-like serineproteases, the peptidase family S1. Tryptases are enzymaticallyactive only as heparin-stabilized tetramers, and they are resistantto all known endogenous proteinase inhibitors. Several tryptasegenes are clustered on chromosome 16p13.3. These genes arecharacterized by several distinct features. They have a highlyconserved 3' UTR and contain tandem repeat sequences at the 5'flank and 3' UTR which are thought to play a role in regulation ofthe mRNA stability. These genes have an intron immediately upstreamof the initiator Met codon, which separates the site oftranscription initiation from protein coding sequence. This featureis characteristic of tryptases but is unusual in other genes. Thealleles of this gene exhibit an unusual amount of sequencevariation, such that the alleles were once thought to represent twoseparate genes, alpha and beta 1. Beta tryptases appear to be themain isoenzymes expressed in mast cells; whereas in basophils,alpha tryptases predominate. Tryptases have been implicated asmediators in the pathogenesis of asthma and other allergic andinflammatory disorders.

TPSAB1 Antibody (C-term) Blocking peptide - References

Lee, J.W., et al. Dig. Dis. Sci. 55(10):2922-2928(2010)Trivedi, N.N., et al. J. Allergy Clin. Immunol. 124(5):1099-1105(2009)Radhakrishnan, Y., et al. Biol. Reprod. 81(4):647-656(2009)Schiemann, F., et al. J. Immunol. 183(4):2223-2231(2009)Wei, Z.Y., et al. Fa Yi Xue Za Zhi 25(3):164-167(2009)