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

TPSB2 Rabbit pAb

Catalog # AP96420

Product Information

Application	WB, E
Predicted	Rat, Pig, Human, Mouse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse TPSB2
Epitope Specificity	201-276/276
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase S1 family. Tryptase subfamily. Contains 1 peptidase S1 domain.
SUBUNIT	Homotetramer. The active tetramer is converted to inactive monomers at neutral and acidic pH in the absence of heparin. Low concentrations of inactive monomers become active monomers at pH 6.0 in the presence of heparin. When the concentration of active monomers is higher, they convert to active monomers and then to active tetramers. These monomers are active and functionally distinct from the tetrameric enzyme. In contrast to the hidden active sites in the tetrameric form, the active site of the monomeric form is accessible for macromolecular proteins and inhibitors eg: fibrinogen which is a substrate for the monomeric but not for the tetrameric form. The monomeric form forms a complex with SERPINB6.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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, beta II and beta III. 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.

Additional Information

Other Names	TPS2; tryptaseB; tryptaseC; TRYB2_HUMAN; TPSB2; Tryptase-2; Tryptase II; 3.4.21.59; tryptase beta 2; tryptase beta 2 (gene/pseudogene); tryptase beta II; tryptase beta III
Dilution	WB=1:500-2000,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Name	TPSB2 Rabbit pAb
Function	Tryptase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type. Has an immunoprotective role during bacterial infection. Required to efficiently combat K.pneumoniae infection (By similarity).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.