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Mast Cell Tryptase Recombinant Rabbit mAb

Catalog # AP100142

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q15661
Other Accession	Q15661
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	30515
Physical State	Liquid
Immunogen	A synthesized peptide derived from human Tryptase 1
Epitope Specificity	10-275/275
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.
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. Although this gene may be an exception, most of the tryptase 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. Tryptases have been implicated as mediators in the pathogenesis of asthma and other allergic and inflammatory disorders. This gene was once considered to be a pseudogene, although it is now believed to be a functional gene that encodes a protein. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	7177
Other Names	TPS1; TPS2; TPSB1; TPSB2; Tryptase-2; MMCP-7; Mcp-7; Mcp7; Mcpt7; rMCP-7; TRYB1_HUMAN; TPSAB1; Tryptase-1; Tryptase I; Tryptase alpha-1; 3.4.21.59; TRYB1_MOUSE; Mast cell protease 7 (mMCP-7); Tryptase alpha/beta-1; TRYB1_RAT; Mast cell protease 7 (rMCP-7); Tryptase, skin; TRYB2_HUMAN; Tryptase II; tryptase alpha/beta 1; tryptase beta 1; tryptase alpha II; tryptase

	beta I; tryptase-I; tryptase-II; tryptase-III; mast cell tryptase
Dilution	WB=1:500-5000,IHC-P=1:200-1000,IHC-F=1:200-1000,IF=1:200-1000
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.

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)

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