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TPSAB1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant TPSAB1.
Catalog # AT4326a

Product Information

Application	WB, IHC, E
Primary Accession	Q15661
Other Accession	BC028059
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a kappa
Clone Names	2A10-B5
Calculated MW	30515

Additional Information

Gene ID	7177
Other Names	Tryptase alpha/beta-1, Tryptase-1, Tryptase I, Tryptase alpha-1, TPSAB1, TPS1, TPS2, TPSB1
Target/Specificity	TPSAB1 (AAH28059, 1 a.a. ~ 275 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	TPSAB1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

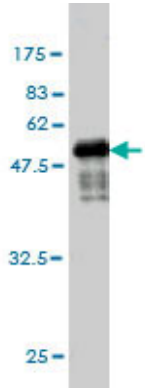
Tryptases comprise a family of trypsin-like serine proteases, the peptidase family S1. Tryptases are enzymatically active only as heparin-stabilized tetramers, and they are resistant to all known endogenous proteinase inhibitors. Several tryptase genes are clustered on chromosome 16p13.3. These genes 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.

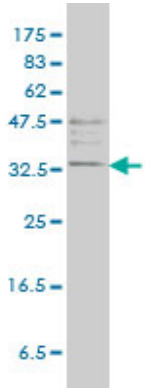
References

Human subjects are protected from mast cell tryptase deficiency despite frequent inheritance of loss-of-function mutations. Trivedi NN, et al. J Allergy Clin Immunol, 2009 Nov. PMID 19748655.[Expression of tryptase and chymase in human lung tissue of anaphylactic shock] Wei ZY, et al. Fa Yi Xue Za Zhi, 2009 Jun. PMID 19697770.The cathelicidin LL-37 activates human mast cells and is degraded by mast cell tryptase: counter-regulation by CXCL4. Schiemann F, et al. J Immunol, 2009 Aug 15. PMID 19625657.Novel partners of SPAG11B isoform D in the human male reproductive tract. Radhakrishnan Y, et al. Biol Reprod, 2009 Oct. PMID 19535787.Co-localization of tryptase and cathepsin-G in mast cells in cutaneous mastocytosis. Ribatti D, et al. Cancer Lett, 2009 Jul 8. PMID 19250736.

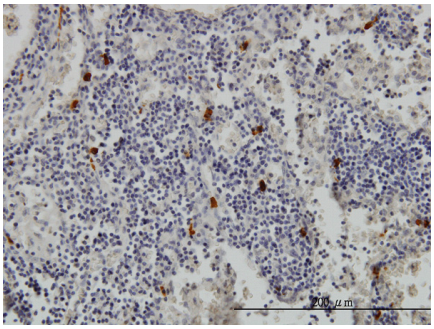
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (55.99 KDa) .

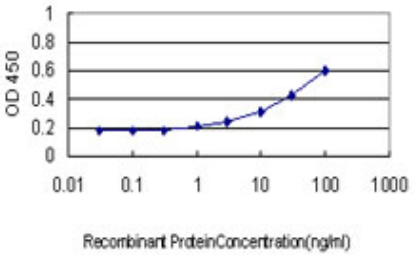


TPSAB1 monoclonal antibody (M01), clone 2A10-B5. Western Blot analysis of TPSAB1 expression in K-562.



Immunoperoxidase of monoclonal antibody to TPSAB1 on formalin-fixed paraffin-embedded human lymph node. [antibody concentration 1 ug/ml]

Detection limit for recombinant GST tagged TPSAB1 is approximately 0.3ng/ml as a capture antibody.



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