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TPSD1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10500b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9BZJ3
Other Accession	NP_036349.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24357
Calculated MW	26584
Antigen Region	164-193

Additional Information

Gene ID	23430
Other Names	Tryptase delta, Delta-tryptase, HmMCP-3-like tryptase III, Mast cell mMCP-7-like, Tryptase-3, TPSD1
Target/Specificity	This TPSD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 164-193 amino acids from the C-terminal region of human TPSD1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	TPSD1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TPSD1
Function	Tryptase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type.

Cellular Location	Secreted. Note=Released from the secretory granules upon mast cell activation.
Tissue Location	Expressed in colon, lung, heart and synovial tissue. May be specific to mast cells.

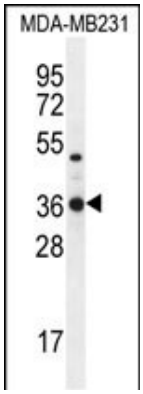
Background

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. 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. TPSD1 was once considered to be a pseudogene, although it is now believed to be a functional gene that encodes a protein.

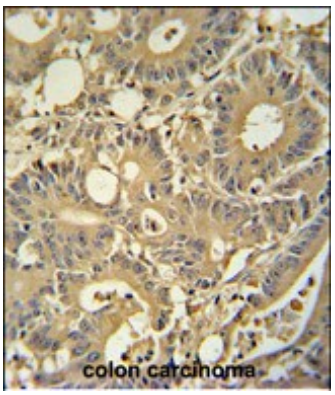
References

Jackson, N.E., et al. J. Biol. Chem. 283(49):34178-34187(2008)
Caughey, G.H. J. Allergy Clin. Immunol. 117(6):1411-1414(2006)
Wang, H.W., et al. J. Immunol. 169(9):5145-5152(2002)
Caughey, G.H. Mol. Immunol. 38 (16-18), 1353-1357 (2002) :
Soto, D., et al. Clin. Exp. Allergy 32(7):1000-1006(2002)

Images



TPSD1 Antibody (C-term) (Cat. #AP10500b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the TPSD1 antibody detected the TPSD1 protein (arrow).



TPSD1 antibody (C-term) (Cat. #AP10500b) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the TPSD1 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.