

ARG22511 anti-Mast Cell Tryptase antibody [AA1]

Package: 100 µg

Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [AA1] recognizes Mast Cell Tryptase This antibody recognizes human mast cell tryptase, both alpha and beta isoforms. Mouse anti Mast cell tryptase, clone AA1 is an excellent marker for mast cells, and does not bind to any other cell type in immunohistology (Walls et al. 1990). Tryptases are the products of a number of genes and form the major neutral protease present in mast cells secreted in response to infection and injury. Mast cell tryptase has an important role in the pathology of inflammatory diseases, especially asthma through bronchoconstriction (Zhang and Timmerman 1997).
Tested Reactivity	Hu, Rat, Cat, Dog, Mk
Tested Application	ELISA, ICC/IF, IHC-Fr, IHC-P
Specificity	This antibody recognizes human mast cell tryptase, both alpha and beta isoforms. Including protein Tryptase alpha/beta-1 (TPSAB1) and Tryptase beta-2 (TPSB2).
Host	Mouse
Clonality	Monoclonal
Clone	AA1
Isotype	IgG1
Target Name	Mast Cell Tryptase
Species	Human
Immunogen	Human mast cell tryptase purified from human lung tissue.
Conjugation	Un-conjugated
Alternate Names	tryptaseC; tryptaseB; Tryptase beta-2; TPS2; Tryptase II; EC 3.4.21.59; Tryptase-2; TPS1, TPS2, TPSB1

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	1:10000
Application Note	IHC-P: This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

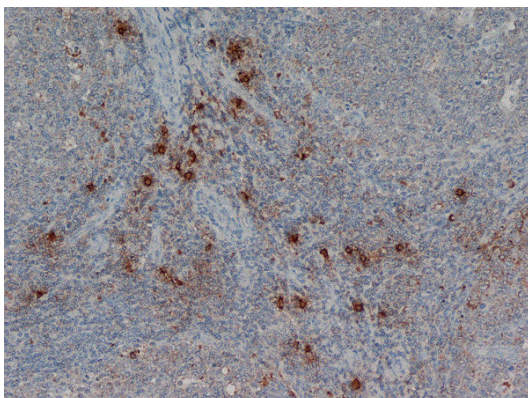
Form	Liquid
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Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TPSAB1 + TPSB2
Gene Full Name	Tryptase alpha/beta-1 + tryptase beta 2 (gene/pseudogene)
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, 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. [provided by RefSeq, Jul 2008]
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. [UniProt]
Calculated Mw	31 kDa

Images



ARG22511 anti-Mast Cell Tryptase antibody [AA1] IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil stained with ARG22511 anti-Mast Cell Tryptase antibody [AA1].