



Mast cell tryptase (PT2024) mouse mAb

Catalog No	YP-Ab-15409
Isotype	IgG
Reactivity	Human
Applications	IHC;IF;ELISA
Gene Name	TPSAB1 TPS1 TPS2 TPSB1
Protein Name	Tryptase alpha/beta-1 (Tryptase-1) (Tryptase I) (Tryptase alpha-1)
Immunogen	Synthesized peptide derived from human Mast cell tryptase AA range: 200-275
Specificity	The antibody was affinity-purified from ascites by affinity-chromatography using specific immunogen.
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Mouse, Monoclonal/IgG1, Kappa
Purification	The antibody can specifically recognize human Mast cell tryptase protein.
Dilution	IHC 1:200-400; IF 1:50-200; ELISA 1:500-5000 Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Calculated Molecular Weight	30kD
Observed Band	30kD
Cell Pathway	Cytoplasmic
Tissue Specificity	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).
Function	Catalytic activity:Preferential cleavage: Arg- -Xaa, Lys- -Xaa, but with more restricted specificity than trypsin.,Function:Tryptase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type.,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.,polymorphism:There are two alleles; beta-II and beta-III which differ by 3 residues.,similarity:Belongs to the peptidase S1 family.,similarity:Belongs to the peptidase S1 family. Tryptase subfamily.,similarity:Contains 1 peptidase S1 domain.,subcellular location:Released from the secretory granules upon mast cell activation.,subunit:Homotetramer.,



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 gene

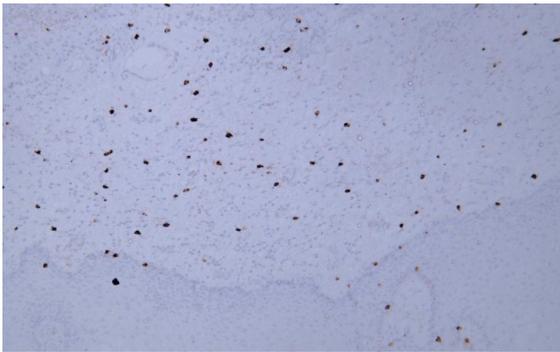
matters needing attention

Avoid repeated freezing and thawing!

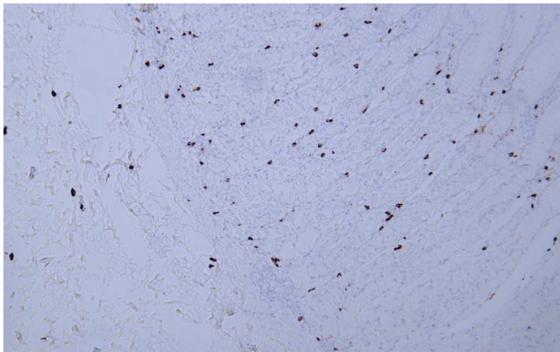
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

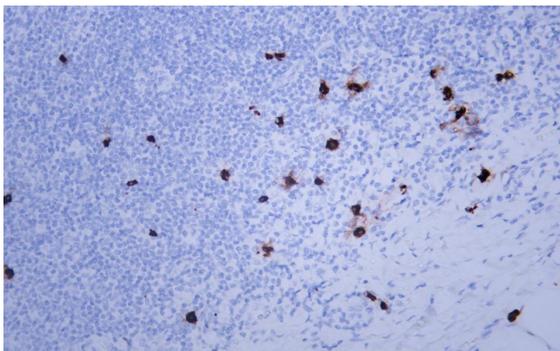
Products Images



Human cervical squamous cell carcinoma tissue was stained with Anti-Mast Cell Tryptase (ABT194) Antibody



Human stomach tissue was stained with Anti-Mast Cell Tryptase (ABT194) Antibody



Human tonsil tissue was stained with Anti-Mast Cell Tryptase (ABT194) Antibody