

Mast Cell Tryptase Antibody / TPSAB1 (R32453)

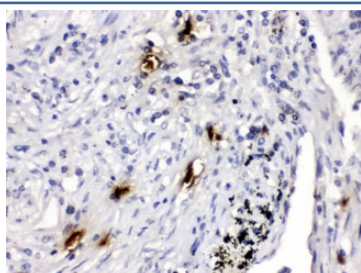
Catalog No.	Formulation	Size
R32453	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q15661
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 1-2ug/ml ELISA : 0.1-0.5ug/ml (human protein tested); request BSA-free format for coating
Limitations	This Mast Cell Tryptase antibody is available for research use only.



Western blot testing of human HEK293 cell lysate with Mast Cell Tryptase antibody at 0.5ug/ml. Expected molecular weight ~30 kDa.



IHC testing of FFPE human lung cancer tissue with Mast Cell Tryptase antibody at 1ug/ml. HIER: steam in pH6 citrate buffer and allow to cool prior to staining.

Description

Tryptase alpha-1 and tryptase beta-1 are enzymes that in humans are encoded by the same TPSAB1 gene. 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. In addition, 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.

Application Notes

Optimal dilution of the Mast Cell Tryptase antibody should be determined by the researcher.

Immunogen

Amino acids H65-P275 from the human protein were used as the immunogen for the Mast Cell Tryptase antibody.

Storage

Prior to reconstitution, store at 4oC. After reconstitution, the Mast Cell Tryptase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.