

## Mast cell tryptase (ABT233R) rabbit mAb

Catalog No :	YM7150
Reactivity :	Human;
Applications :	IHC; ELISA
Target :	Mast cell tryptase
Fields :	>>Influenza A
Gene Name :	TPSAB1
Protein Name :	Tryptase alpha/beta-1 (Tryptase-1) (EC 3.4.21.59) (Tryptase I) (Tryptase alpha-1)
Human Gene Id :	7177
Human Swiss Prot No :	Q15661
Immunogen :	Synthesized peptide derived from human Mast cell tryptase AA range:200-275
Specificity :	This antibody detects endogenous levels of Mast cell tryptase
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, Rabbit IgG1, Kappa
Dilution :	IHC 1:100-500, ELISA 1:5000-20000
Purification :	Recombinant Expression and Affinity purified
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
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

## **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.,

## Subcellular Location : Cytoplasmic Expression : 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

## **Products Images**

levels, if any, in mast cells (at protein level).