Recombinant Protein Technical Manual

Recombinant Mouse MCPT6/Mast Cell Protease-6 Protein (His Tag)

RPES0402

Product Data:

Product SKU: RPES0402

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P21845

Protein Information:

Molecular Mass:	29.3 kDa
AP Molecular Mass:	32-38 kDa
Tag:	C-His
Bio-activity:	
Purity:	> 95% as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl,150mMNacl,pH 7.5.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Tryptase beta-2; Tryptase-2; Mast cell protease 6; mMCP-6; Tpsb2

Immunogen Information:

Sequence: Ala23-Ser276

Background:

Tryptase beta-2(Tpsb2), also known as Mast cell protease 6(mMCP-6), belongs to the peptidase S1 family and Tryptase subfamily. Tryptase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type. It plays a role in innate immunity. Tpsb2 can be detected primarily in skin during embryogenesis. Tpsb2 can not be detected at early embryonic stages but is abundantly expressed in later stages with a peak at E17.5-E18.5. Tryptase is a homotetramer. The active tetramer is converted to inactive monomers at neutral and acidic pH in the absence of heparin. Low concentrations of inactive monomers become active monomers at pH 6.0 in the presence of heparin. When the concentration of active monomers is higher, they convert to active monomers and then to active tetramers. These monomers are active and functionally distinct from the tetrameric enzyme. In contrast to the hidden active sites in the tetrameric form, the active site of the monomeric form is accessible for macromolecular proteins and inhibitors eg: fibrinogen which is a substrate for the monomeric but not for the tetrameric form. The monomeric form forms a complex with SERPINB6.