

Tryptase (E5F3Q) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	25-40	Rabbit IgG	#Q15661	7177

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

Specificity/Sensitivity

Tryptase (E5F3Q) Rabbit mAb recognizes endogenous levels of total Tryptase protein. This antibody does not cross-react with murine Tryptase proteins.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala120 of human Tryptase protein.

Background

Tryptase is the most abundant neutral serine protease expressed in the secretory granules of all human mast cells (1). Tryptase is secreted upon the coupled activation-degranulation response of mast cells in peripheral tissues to physical factors such as trauma, toxins, venoms, endogenous mediators, and immune mechanisms (IgE-dependent and IgE-independent) (2). Tryptase has distinct enzymatic functions that depend on the monomeric or homotetrameric state of this protein, the pH of the environment, and the presence or absence of heparin (3-5). Tryptase has the ability to cleave extracellular substrates such as vasoactive intestinal peptides (6), calcitonin gene-related peptides (7), fibronectins (8), fibrinogens (3), and kininogens (9). Tryptase is also a potent growth factor for epithelial cells, airway smooth muscle cells, and fibroblasts (10-13).

Background References

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2. Krishnaswamy, G. et al. (2001) *Front Biosci* 6, D1109-27.
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4. Ren, S. et al. (1998) *J Immunol* 160, 4561-9.
5. Sakai, K. et al. (1996) *J Clin Invest* 97, 988-95.
6. Tam, E.K. and Caughey, G.H. (1990) *Am J Respir Cell Mol Biol* 3, 27-32.
7. Walls, A.F. et al. (1992) *Biochem Pharmacol* 43, 1243-8.
8. Lohi, J. et al. (1992) *J Cell Biochem* 50, 337-49.
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10. Cairns, J.A. and Walls, A.F. (1996) *J Immunol* 156, 275-83.
11. Ruoss, S.J. et al. (1991) *J Clin Invest* 88, 493-9.
12. Brown, J.K. et al. (1995) *Am J Respir Cell Mol Biol* 13, 227-36.
13. Gruber, B.L. et al. (1997) *J Immunol* 158, 2310-7.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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