Datasheet: MCA1438T

BATCH NUMBER 171620

Description:	MOUSE ANTI HUMAN MAST CELL TRYPTASE
Specificity:	MAST CELL TRYPTASE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AA1
Isotype:	IgG1
Quantity:	20 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/10,000
ELISA	▪			
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species

Human

Species Cross Reactivity

Reacts with: Dog, Monkey, Cat, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human mast cell tryptase purified from human lung tissue.
External Database Links	**UniProt:** P20231 Related reagents Q15661 Related reagents **Entrez Gene:** 64499 TPSB2 Related reagents 7177 TPSAB1 Related reagents
Synonyms	TPS1, TPS2, TPSB1
RRID	AB_2206190
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Mouse anti Human mast cell tryptase, clone AA1** recognizes human mast cell tryptase, both alpha and beta isoforms. Mouse anti Mast cell tryptase, clone AA1 is an excellent marker for mast cells, and does not bind to any other cell type in immunohistology (Walls *et al.* 1990). Tryptases are the products of a number of genes and form the major neutral protease present in mast cells secreted in response to infection and injury. Mast cell tryptase has an important role in the pathology of inflammatory diseases, especially asthma through bronchoconstriction (Zhang and Timmerman 1997).
Histology Positive Control Tissue	Human tonsil
References	1. Walls, A.F. *et al.* (1990) Immunohistochemical identification of mast cells in formaldehyde-fixed tissue using monoclonal antibodies specific for tryptase. J Pathol. 162 (2): 119-26. 2. Ozaki, K. *et al.* (2002) Mast cell tumors of the gastrointestinal tract in 39 dogs. Vet Pathol. 39 (5): 557-64.

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9. Liu, J. *et al.* (2009) Genetic deficiency and pharmacological stabilization of mast cells reduce diet-induced obesity and diabetes in mice. Nat Med. 15: 940-5.
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11. Dichlberger, A. *et al.* (2011) Lipid body formation during maturation of human mast cells. J Lipid Res. 52: 2198-208.
12. Perbellini, O. *et al.* (2011) Primary role of multiparametric flow cytometry in the diagnostic work-up of indolent clonal mast cell disorders. Cytometry B Clin Cytom. 80 (6): 362-8.
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14. Kazama, I. *et al.* (2015) Mast cell involvement in the progression of peritoneal fibrosis in rats with chronic renal failure. Nephrology (Carlton). 20 (9): 609-16.
15. Luo, J. *et al.* (2016) An indispensable role of CPT-1a to survive cancer cells during energy stress through rewiring cancer metabolism. Tumour Biol. Oct 13 [Epub ahead of print].
16. Kato, Y. *et al.* (2016) Cutaneous mastocytosis with a mutation in the juxtamembrane domain of c-kit in a young laboratory beagle dog. J Toxicol Pathol. 29 (1): 49-52.
17. Woldemeskel, M.W. *et al.* (2013) Mast cells in Canine parvovirus-2-associated enteritis with crypt abscess. Vet Pathol. 50 (6): 989-93.
18. Baba, A. *et al.* (2017) Less contribution of mast cells to the progression of renal fibrosis in Rat kidneys with chronic renal failure. Nephrology (Carlton). 22 (2): 159-67.

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1438T
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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