Novocastra™ Lyophilized Mouse Monoclonal Antibody Mast Cell Tryptase

Product Code: NCL-MCTRYP-428

Intended Use	**For In Vitro Diagnostic Use:** This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Specificity	Human mast cell tryptase.
Clone	10D11
Ig Class	IgG2b, kappa
Antigen Used for Immunizations	Prokaryotic recombinant protein corresponding to the unbound region of the human mast cell tryptase molecule
Hybridoma Partner	Mouse myeloma (p3-NS1-Ag4-1).
Preparation	Lyophilized tissue culture supernatant containing 15 mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.
Effective on Frozen Tissue	No
Effective on Paraffin Wax Embedded Tissue	Yes
Recommendations on Use	Immunohistochemistry: Typical working dilution 1:150–1:300. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Not recommended.
Positive Controls	Immunohistochemistry: Tonsil.
Staining Pattern	Cytoplasmic.
Storage and Stability	Store unopened lyophilized antibody at 4 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.
General Overview	Mast cells contain a number of preformed chemical mediators such as histamine, chymase, carboxypeptidase and proteolytic tryptase. A substantial quantity of tryptase is estimated to be found in mast cells of skin and lung and suggests this enzyme plays a major role in mast cell mediated events. In vitro studies indicate tryptase can cleave C3 to form C3a anaphylatoxin, inactivate fibrinogen as a coaguable substrate for thrombin and activate latent collagenase. Human mast cell tryptase has considerable potential as a marker for mast cell activation as well as being a mediator of inflammation. Immunohistochemical evaluation provides an advantage over histological identification which requires special fixatives to preserve the tryptase-containing granules together with basic dyes which are needed to highlight them.
General References	Takanami I, Takeuchi K and Naruke M. Cancer. 88: 2686–2692 (2000). Steinhoff M, Corvera C U, Thoma M S, et al.. Exp. Dermatol. 8 (4): 282–294 (1999). Compton S J, Cairns J A, Holgate S T, et al.. Journal of Immunology. 161 (4): 1939–1946 (1998). Lindstedt K A, Kokkonen J O and Kovanen P T. Biochim. Biophys. Acta. 1425 (3): 617–627 (1998). Bischoff S C, Wedemeyer J, Herrmann A, et al.. Histopathology. 28 (1): 1–13 (1996). Morgan S J, Williams J H, Walls A F, et al.. J. Allergy Clin. Immunol. 87 (1:1): 111–116 (1991). Walls A F, Bennet A R, Godfrey R C, et al.. Clinical Science. 81: 183–188 (1991). Goldsmith P, McGarity B, Walls A F, et al.. Digestive Diseases and Sciences. 35 (11): 1409–1413 (1990). Walls A F, Jones D B, Williams J H, et al.. Journal of Pathology. 162: 119–126 (1990).

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