# Novocastra™ Lyophilized Mouse Monoclonal Antibody Myeloperoxidase

MICROSYSTEMS

## Product Code: NCL-MYELO

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| **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 myeloperoxidase. |
| **Clone** | 59A5 |
| **Ig Class** | IgG2b, kappa |
| **Antigen Used for Immunizations** | Prokaryotic recombinant protein corresponding to 101 amino acids from exon 7 of the human myeloperoxidase molecule. |
| **Hybridoma Partner** | Mouse myeloma (p3-NS1-Ag4-1). |
| **Preparation** | Lyophilized tissue culture supernatant containing 15 mM sodium azide.<br>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 1:75–1:150. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Not fully evaluated. |
| **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** | Myeloperoxidase is a lysosomal enzyme found in cells of the myeloid series which metabolizes most of the hydrogen peroxide generated by activated phagocytes. Myeloperoxidase is a major constituent of azurophilic cytoplasmic granules that uses hydrogen peroxide to oxidize a variety of aromatic compounds and chloride ions to hypochlorous acid (HOCl), a strong oxidant. HOCl is the most bacteriocidal oxidant known to be produced by the neutrophil. HOCl in turn, reacts with proteins to form cytotoxic chloramines. |
| **General References** | Arber D A, Snyder D S, Fine M, et al.. American Journal of Clinical Pathology. 116 (1): 25–33 (2001).<br>Boomsma M M, Stegeman C A, Oost-Kort W W, et al.. Journal of Immunological Methods. 254 (1–2): 47–58 (2001).<br>Brown K E, Brunt E M and Heinecke J W. American Journal of Pathology. 159 (6): 2081–2088 (2001).<br>Conlin P A, Orden M B, Hough T R, et al.. Archives of Pathology and Laboratory Medicine. 125 (7): 948–950 (2001).<br>de Andrade J A, Christie J D, Alexander C B, et al.. Journal of Investigative Medicine. 49 (2): 166–172 (2001).<br>Dunphy C H, Polski J M, Evans H L, et al.. Archives of Pathology and Laboratory Medicine. 125 (8): 1063–1069 (2001).<br>Freire B A, Paula I D, Paula F, et al.. American Journal of Medical Science. 321 (2): 109–112 (2001).<br>Hammer A, Desoye G, Dohr G, et al.. Laboratory Investigation. 81 (4): 543–554 (2001).<br>Hampton M B, Kettle A J and Winterbourn C C. The Journal of The American Society of Hematology. 92 (9): 3007–3017 (1998).<br>Sullivan S, Salapow M A, Breen R, et al.. International Archives of Allergy and Immunology. 105: 150–154 (1994). |

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