



Myeloperoxidase (MPO) Ab-1

Rabbit Polyclonal Antibody

Cat. #DLN-12930, -12931 or 12929 (0.1ml, 0.5ml, or 1.0ml)

Cat. #DLN-12932 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

Description: Myeloperoxidase is an important enzyme used by granulocytes during phagocytic lysis of foreign particles engulfed. In normal tissues and in a variety of myeloproliferative disorders myeloid cells of both neutrophilic and eosinophilic types, at all stages of maturation, exhibit strong cytoplasmic reactivity for MPO. Erythroid precursors, megakaryocytes, lymphoid cells, mast cells, and plasma cells are nonreactive. MPO is not observed in the neoplastic cells of a wide variety of epithelial tumors and sarcomas. MPO is useful in differentiating between myeloid and lymphoid leukemias.

Epitope: Not determined

Species Reactivity: Human, Mouse, and Rat. Others-not known

Immunogen: Purified human granulocytic MPO

Applications and Suggested Dilutions:

- Immunohistology (Formalin/paraffin)
(Ab 1:100-1:200 for 30min at RT)
- * [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Tonsil or spleen

Cellular Localization: Cytoplasmic

Supplied As:

Purified antibody fraction from rabbit anti-serum. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide or prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability:

Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months.

Suggested References:

1. Chuang SS; Li CY. . American Journal of Clinical Pathology, 1997 Apr, 107(4):410-8.
2. Arber DA; Jenkins KA. American Journal of Clinical Pathology, 1996 Oct, 106(4):462-8.

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Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Dianova is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

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Additional Suggested References:

1. Chuang SS; Li CY. Useful panel of antibodies for the classification of acute leukemia by immunohistochemical methods in bone marrow trephine biopsy specimens. *American Journal of Clinical Pathology*, 1997 Apr, 107(4):410-8.
2. Arber DA; Jenkins KA. Paraffin section immunophenotyping of acute leukemias in bone marrow specimens. *American Journal of Clinical Pathology*, 1996 Oct, 106(4):462-8.
3. Chubachi A; Wakui H; Miura I; Saitoh M; Nishinari T; Nishimura S; Miura AB. Extramedullary megakaryoblastic tumors following an indolent phase of myelofibrosis. *Leukemia and Lymphoma*, 1995 Apr, 17(3-4):351-4.
4. Mutasa HC. Changes in neutrophil granule protein and cytoplasmic fibrils in human acute myeloid leukemias. *Biotechnic and Histochemistry*, 1995 May, 70(3):124-34.
5. Nagai K; Sohma H; Kuriyama K; Kamihira S; Tomonaga M. Usefulness of immunocytochemistry for phenotypical analysis of acute leukemia; improved fixation procedure and comparative study with flow cytometry. *Leukemia and Lymphoma*, 1995 Jan, 16(3-4):319-27.
6. Oren A; Taylor JM. The subcellular localization of defensins and myeloperoxidase in human neutrophils: immunocytochemical evidence for azurophil granule heterogeneity. *Journal of Laboratory and Clinical Medicine*, 1995, 125:340-7.
7. Quintanilla-Martinez L; Zukerberg LR; Ferry JA; Harris NL. Extramedullary tumors of lymphoid or myeloid blasts. The role of immunohistology in diagnosis and classification. *American Journal of Clinical Pathology*, 1995 Oct, 104(4):431-43.
8. Stasi R; Del Poeta G; Venditti A; Bruno A; Suppo G; Aronica G; Di Carlo G; Papa G. Lineage identification of acute leukemias: relevance of immunologic and ultrastructural techniques. *Hematologic Pathology*, 1995, 9(2):79-94.
9. Ballinger CA; Mendis-Handagama C; Kalmar JR; Arnold RR; Kinkade JM Jr. Changes in the localization of catalase during differentiation of neutrophilic granulocytes. *Blood*, 1994, 83:2654-68.
10. Daugherty A; Dunn JL; Rateri DL; Heinecke JW. Myeloperoxidase, a catalyst for lipoprotein oxidation, is expressed in human atherosclerotic lesions. *Journal of Clinical Investigation*, 1994 Jul, 94(1):437-44.
11. Farahat N; van der Plas D; Praxedes M; Morilla R; Matutes E; Catovsky D. Demonstration of cytoplasmic and nuclear antigens in acute leukaemia using flow cytometry. *Journal of Clinical Pathology*, 1994 Sep, 47(9):843-9.
12. Hudock J; Chatten J; Miettinen M. Immunohistochemical evaluation of myeloid leukemia infiltrates (granulocytic sarcomas) in formaldehyde-fixed, paraffin-embedded tissue. *American Journal of Clinical Pathology*, 1994 Jul, 102(1):55-60.
13. da Fonseca LM; Brunetti IL; Rego EM; Garcia AB; Cilento G; Falcao RP. Characterization of myeloid or lymphoid acute leukemia by a chemiluminescence assay. Comparison with immunocytochemistry using an antimyeloperoxidase antibody. *Acta Haematologica*, 1993, 90(1):19-24.
14. Lepelley P; Preudhomme C; Sartiaux C; Ghevaert C; Lai JL; Iaru T; Fenaux P; Cosson A. Immunological detection of myeloperoxidase in poorly differentiated acute leukemia. *European Journal of Haematology*, 1993 Mar, 50(3):155-9.
15. Hammer RD; Collins RD; Ebrahimi S; Casey TT. Rapid immunocytochemical analysis of acute leukemias. *Am J of Clin Pathol*, 1992, 97:876-84.
16. Rosenthal NS; Farhi DC. Acute monocytic leukemia with chloroacetate esterase positivity. FAB M4 or M5? [see comments]. *American Journal of Clinical Pathology*, 1992 Jul, 98(1):41-5.
17. Seshi B; Kashyap A; Bennett JM. Acute myeloid leukaemia with an unusual phenotype: myeloperoxidase (+), CD13 (-), CD14 (-) and CD33 (-). *British Journal of Haematology*, 1992, 81:374-7.
18. Arkema JM; Schadee-Eestermans IL; Beelen RH; Hoefsmit EC. A combined method for both endogenous myeloperoxidase and acid phosphatase cytochemistry as well as immunoperoxidase surface labelling discriminating human peripheral blood-derived dendritic cells and monocytes. *Histochemistry*, 1991, 95(6):573-8.
19. Lanza F; Latorraca A; Musto P; Ferrari L; Moretti S; Zabucchi G; Carotenuto M; Castoldi GL. Cytochemically unreactive neutrophils from subjects with myeloperoxidase (MPO) deficiency show a complex pattern of immunoreactivity with anti-MPO monoclonal antibodies: a flow cytometric and immunocytochemical study. *Annals of Hematology*, 1991 Aug, 63(2):94-100.
20. Pinkus GS; Pinkus JL. Myeloperoxidase: a specific marker for myeloid cells in paraffin sections. *Modern Pathology*, 1991 Nov, 4(6):733-41.
21. Campana D; Hansen-Hagge TE; Matutes E; Coustan-Smith E; Yokota S; Shetty V; Bartram CR; Janossy G. Phenotypic, genotypic, cytochemical, and ultrastructural characterization of acute undifferentiated leukemia. *Leukemia*, 1990, 4:620-4.
22. Kantarjian HM; Hirsch-Ginsberg C; Yee G; Huh Y; Freireich EJ; Stass S. Mixed-lineage leukemia revisited: acute lymphocytic leukemia with myeloperoxidase-positive blasts by electron microscopy. *Blood*, 1990, 76:808-13.
23. Kargi HA; Campbell EJ; Kuhn C 3d. Elastase and cathepsin G of human monocytes: heterogeneity and subcellular localization to peroxidase-positive granules. *Journal of Histochemistry and Cytochemistry*, 1990, 38:1179-86.

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