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Monoclonal Antibody to Myeloid specific antigen (Myeloid Cell AM33331PU-T

Marker) - Purified

Quantity: 20 μg **Concentration:** 0.2 mg/ml

Background: BM-1 antigen is a 183 kD myeloid-specific-DNA-binding protein which is expressed in

> myeloid cells, including myeloid precursors and mature granulocytes. It is also expressed in chronic myeloid leukemia (CML) and M2 and M3 acute myeloid

leukemias (AML) as well as myelomonocytic leukemias, but not in T, B, NK and other non-hematopoietic cells. The biological function of this antigen is not clear, although it has been proposed that BM-1 may play a role in the differentiation of myeloid cells.

Host / Isotype: Mouse / IgG1

Recommended Isotype

Controls:

SM10P (for use in human samples), AM03095PU-N

Clone: BM-1

Immunogen: Human peripheral blood mononuclear cells.

State: Liquid purified IgG fraction from Bioreactor Concentrate Format:

Purification: Protein A/G Chromatography

Buffer System: 10mM PBS

Preservatives: 0.05% Sodium Azide

Stabilizers: 0.05% BSA

Applications: Flow Cytometry: 0.5-1 µg/million cells.

Immunofluorescence: 1-2 µg/ml.

Immunohistochemistry on Frozen Sections: 0.5-1 µg/ml. and Formalin-Fixed Paraffin Sections: 0.5-1 µg/ml.

Incubation Time: 30 minutes at RT.

No special pretreatment is required for staining of formalin/paraffin tissues.

Positive Control: Bone marrow, lymph node or tonsil.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Molecular Weight: 183kDa



Specificity:

Recognizes 183kDa protein with DNA-binding characteristics, which is identified as a myeloid specific antigen. BM-1 reacts with myeloid precursor cells and granulocytes in bone marrow. Its antigen appears to be restricted to M2 and M3 acute myelogenous leukemia (AML) subtypes. Markers of myeloid cells are useful in the identification of different levels of cellular differentiation. BM-1 and BM-2 antibodies react with early precursor and mature forms of human myeloid cells.

BM-1 Monoclonal Antibody is useful in the identification of myelogenous leukemias, distinguishing granulocytic sarcomas from lymphoid malignancies and also in the study of differentiation and transformation of human myeloid cells. The biological function of this antigen is not clear, although it has been proposed that BM-1 may play a role in the differentiation of myeloid cells.

<u>Cellular Localization</u>: Cytoplasmic and Nuclear.

Species: Human.

Other species not tested.

Store undiluted at 2-8°C.

Shelf life: one year from despatch.

General Readings: 1. Epstein AL, Samoszuk M, Stathopoulos E, Naeve GS, Clevenger CV, Weil S, et al.

Immunohistochemical characterization of a 183 KD myeloid-specific-DNA-binding protein in B5 fixed, paraffin-embedded tissues, and bone marrow aspirates by monoclonal antibody BM-1. Blood. 1987 Oct;70(4):1124-30. PubMed PMID: 3307947.

Pictures: Formalin-Fixed, Paraffin-Embedded tonsil

stained with Myeloid specific Antibody Cat.-No AM33331PU (Clone BM-1).

