

AM50119PU-N**Monoclonal Antibody to Human IgM (heavy chain) - Purified**

Alternate names:	Human Immunoglobulin M
Quantity:	0.2 mg
Concentration:	0.2 mg/ml
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	SPM557
Immunogen:	Recombinant heavy chain of human IgM. Genename: IGHM
Format:	State: Liquid purified IgG fraction from Bioreactor Concentrate Purification: Protein A/G Chromatography Buffer System: 10mM PBS Preservatives: 0.05% Sodium Azide Stabilizers: 0.05% BSA
Applications:	ELISA: Use Antibody without BSA for Coating. Flow Cytometry: 0.5-1 µg/10 ⁶ cells. Immunofluorescence: 0.5-1 µg/ml. Western Blot: 0.5-1 µg/ml. Immunoprecipitation: 0.5-1 µg/500 µg protein lysate. Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: 0.5-1 µg/ml for 30 minutes 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 minutes. Positive Control: 293T, Raji or hPBL cells. Tonsil or Spleen. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	75kDa
Specificity:	Recognizes a protein of 75kDa, identified as mu heavy chain of human immunoglobulins. It does not cross-react with alpha (IgA), gamma (IgG), epsilon (IgE), or delta (IgD), heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. This MAb is useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas. The most common feature of these malignancies is the restricted expression of a single heavy chain class. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is clonal and therefore malignant. Cellular Localization: Cytoplasm, Cell Surface and Secreted. Species: Human. Other species not tested.
Storage:	Store undiluted at 2-8°C. Shelf life: one year from despatch.

General Readings:

1. Maruyama S, Kubagawa H, Cooper MD. Activation of human B cells and inhibition of their terminal differentiation by monoclonal anti-mu antibodies. *J Immunol.* 1985 Jul;135(1):192-9. PubMed PMID: 3923101.
2. Rudich SM, Winchester R, Mongini PK. Human B cell activation. Evidence for diverse signals provided by various monoclonal anti-IgM antibodies. *J Exp Med.* 1985 Oct 1;162(4):1236-55. PubMed PMID: 2413155.

Pictures:

Formalin-Fixed, Paraffin-Embedded Human Tonsil stained with Human IgM Antibody Cat.-No AM50102PU-N (Clone SPM557).

