

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

<b>Alternate names:</b>	Human Immunoglobulin M
<b>Quantity:</b>	20 µg
<b>Concentration:</b>	0.2 mg/ml
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	SPM557
<b>Immunogen:</b>	Recombinant heavy chain of human IgM. <b>Genename:</b> IGHM
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction from Bioreactor Concentrate <b>Purification:</b> Protein A/G Chromatography <b>Buffer System:</b> 10mM PBS <b>Preservatives:</b> 0.05% Sodium Azide <b>Stabilizers:</b> 0.05% BSA
<b>Applications:</b>	<b>ELISA:</b> Use Antibody without BSA for Coating. <b>Flow Cytometry:</b> 0.5-1 µg/10 <sup>6</sup> cells. <b>Immunofluorescence:</b> 0.5-1 µg/ml. <b>Western Blot:</b> 0.5-1 µg/ml. <b>Immunoprecipitation:</b> 0.5-1 µg/500 µg protein lysate. <b>Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections:</b> 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. <b>Positive Control:</b> 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.
<b>Molecular Weight:</b>	75kDa
<b>Specificity:</b>	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. <b>Cellular Localization:</b> Cytoplasm, Cell Surface and Secreted. <b>Species:</b> Human. Other species not tested.
<b>Storage:</b>	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).

