

**AM08095C5-N****Monoclonal Antibody to Rat IgM (Mu chain specific) - Cy5****Alternate names:**

Rat Immunoglobulin M

**Quantity:**

0.1 mg

**Concentration:**

0.1 mg/ml

**Background:**

IgM normally constitutes about 10% of serum immunoglobulins. IgM antibody is prominent in early immune responses to most antigens and predominates in certain antibody responses such as 'natural' blood group antibodies. IgM (with IgD) is the major immunoglobulin expressed on the surface of B cells. The gene for the mu constant region contains four domains separated by short intervening sequences. Class specific anti immunoglobulin antibodies are useful for: The characterization of malignant B cell proliferations. All but acute lymphocytic leukemias share either surface or intra cytoplasmic Ig with an isotypic restriction, which suggest the monoclonal nature of the cell population. Most of the chronic lymphocytic leukemias, non Hodgkin lymphomas and Burkitt's lymphoma bear surface IgM, whereas plasmocytes from Waldenström's disease bear intracytoplasmic IgM. The other isotypes are less frequently found. On the other hand multiple myelomas are usually of the IgG or IgA type.

Characterization of plasma cells in inflammatory conditions: Plasma cell typing can be of use for the classification of intestinal inflammatory conditions such as inflammatory bowel disease and allergic conditions. In the latter a specific increase in the number of IgE plasma cells can be demonstrated.

**Host / Isotype:**

Mouse / IgG1

**Clone:**

M 2A1

**Format:****State:** Liquid purified Ig fraction.**Buffer System:** PBS containing 0.09% Sodium Azide as preservative.**Label:** Cy5 – Cyanine 5**Applications:****Flow Cytometry** ( $\kappa$  / = 0.3  $\mu$ g/10e6 cells) and **Immunofluorescence Microscopy:** Identification and enumeration of IgM+ cells.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody reacts with the Mu heavy chain (Fc) of Rat IgM.

**Species:** Rat.

Other species not tested.

**Storage:**

Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer.

This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.