

## Mouse Anti-Human IgM Monoclonal Antibody, FITC Conjugated

Mouse, Monoclonal (IgM) Cat. No. DMAB4694 Lot. No. (See product label)

## **PRODUCT INFORMATION**

**Product Overview:** Mab to IgM; Mouse Monoclonal Antibody to Human Immunoglobulin M (IgM),  $\mu$  heavy chain **Clone:** TA-DA5

Ig Isotype: Mouse IgG1

Format: Fluorescein (FITC) Conjugate

Quality: 0.5 mg

**Specificity:** Reacts with the heavy chain of human IgM as demonstrated by ELISA; may also react with IgM from other species

**Applications:** Indirect immunofluorescent staining of IgM<sup>+</sup> human B lymphocytes; Enzyme-Linked-Immunosorbent-Assay (ELISA); Western blotting; Dot- and slot-immunoblotting; Immunohistochemistry (frozen sections);

Immunoblotting, immunoristochemistry (102en sections),

**Characterization:** To insure lot-to-lot consistency, each batch of product is tested by ELISA to conform to characteristics of a standard reference reagent.

**Working Dilutions:** Immunofluorescence: FITC conjugate  $\leq 1 \mu g/10^6$  cells; Other Applications: Since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need.

Handling And Storage: The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C. Protect conjugated forms from light. Each reagent is stable for the period shown on the bottle label if stored as directed. Warning: Reagents contain sodium azide. Sodium azide is very toxic if ingested or inhaled. Avoid contact with skin, eyes, or clothing. Wear eye or face protection when handling. If skin or eye contact occurs, wash with copious amounts of water. If ingested or inhaled, contact a physician immediately. Sodium azide yields toxic hydrazoic acid under acidic conditions. Dilute azide-containing compounds in running water before discarding to avoid accumulation of potentially explosive deposits in lead or copper plumbing.

## BACKGROUND

*Introduction:* Immunoglobulin M, or Ig M for short, is a basic antibody that is produced by B cells. It is the primary antibody against A and B antigens on red blood cells. IgM is by far the physically largest antibody in the human circulatory system. It is the first antibody to appear in response to initial exposure to antigen.

**Keywords:** Constant region of heavy chain of IgM; Hepatitis B virus receptor binding protein; Ig mu chain C region; IGHM; Immunoglobulin mu chain; Imunoglobulin heavy chain; VH; IgM; Immunoglobulin M; IgM  $\mu$ ; Immunoglobulin M  $\mu$ ; IgM heavy chain; Immunoglobulin M heavy chain; IgM  $\mu$  heavy chain; Immunoglobulin M  $\mu$  heavy chain

## REFERENCES

1. Houghton Mifflin Company, 2004. "Immunoglobulin M." The American Heritage Dictionary of the English Language, Fourth Edition. Accessed on 12 Oct. 2007.

2. Erik J. Wiersma, Cathy Collins, Shafie Fazel, and Marc J. Shulman Structural and Functional Analysis of J Chain-Deficient IgM J. Immunol., Jun 1998; 160: 5979-5989.