**BACKGROUND**

Immunoglobulin M (IgM) is the largest circulating antibody molecule in humans. It is the first immunoglobulin expressed by mature B cells, and it normally appears early in the course of an infection and does not reappear after further exposure. Immunoglobulins consist of two heavy chains (\(\mu\)-chains) and two light chains (\(\kappa\) or \(\lambda\) chains), that together comprise the Fab (antigen binding) and Fc (constant) fragments. IgM normally exists as a pentamer, but occasionally as a hexamer. IgM is mainly found in serum, however, it is also important as a secretory immunoglobulin. Monovalent Fab fragments have two antigen binding sites, so they may be used to sterically cover the surface of immunoglobulins for double labeling primary antibodies from the same host species, or to block endogenous immunoglobulins on cell surfaces or in tissue sections. After binding to the primary antibody, most of the secondary antibodies will still have one open binding site, which can capture the second primary antibody from the same species. Consequently, overlapping labeling of the two antigens will occur.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: IGHM (human) mapping to 14q32.33; Igh-6 (mouse) mapping to 12 F1-2.

**SOURCE**

IgM Fab fragment (MA2) is a mouse monoclonal antibody raised against IgM of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2b in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

IgM Fab fragment (MA2) is recommended for detection of Fab-region of IgM of human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of IgM Fab fragment: 57 kDa.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.