3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-Human IgM (μ-Chain Specific)–FITC
produced in goat, affinity isolated antibody

Catalog Number **F9762**

Product Description
Anti-Human IgM is produced in goat using purified human IgM as the immunogen. Affinity isolated antibody is obtained from Anti-Human IgM antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the μ-chain of human IgM. Anti-Human IgM is then conjugated to fluorescein isothiocyanate (FITC), in an alkaline reaction.

Specificity for the μ-chain of human IgM is determined by Ouchterlony Double Diffusion (ODD). The antibody preparation is specific for human IgM when tested against purified human IgA, IgG, IgM, Bence Jones kappa and lambda myeloma proteins. The product is also determined to have no cross reactivity with mouse or rat serum proteins, by ODD.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion versus anti-goat IgG and anti-goat whole serum results in single arcs of precipitation.

Reagent
Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution should be frozen in working aliquots at –20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet USDA requirements

Note: Store product protected from light

Product Profile
Direct Immunofluorescence: the minimum working dilution was determined to be 1:64 using human peripheral blood lymphocytes.

ANA (Anti-Nuclear Antibody) Assay: a minimum working dilution of 1:32 was used on acetone-fixed mouse liver cells with A.N.A positive serum as the primary antibody.

Note: In order to obtain best results, it is recommended that each individual user determine the optimum working dilution for their system by titration assay.

Protein Concentration = 3.0-6.5 mg/ml

F/P Molar Ratio**:** 2.5-6.5

The F/P molar ratio is determined spectrophotometrically as follows:

$$\frac{F}{P} = \frac{A_{495} \times 1.4 \times 0.41}{0.2 \times [A_{280} - (0.36 \times A_{495})]}$$

Where:
0.2 = The extinction coefficient of bound FITC at a concentration of 1 μg/ml at pH 7.2.
0.36 = The fluorochrome absorbance correction factor (non-protein absorbance).
0.41 = The factor for conversion of fluorochrome to protein ratios from weight to molar ratios.

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