

Product No. F-9259
Lot 086H8824

Anti-Mouse IgM (μ -chain specific)
FITC Conjugate

Affinity Isolated Antigen Specific Antibody
Antibody developed in Goat

Anti-Mouse IgM is developed in goat using purified mouse IgM as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-mouse IgM antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the μ -chain of mouse IgM. Goat anti-mouse IgM is then conjugated to Sigma Fluorescein Isothiocyanate (FITC), Isomer I (Sigma Product No. F-7250). Following conjugation, unbound FITC is removed by extensive dialysis. The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 15 mM sodium azide (see MSDS)* as a preservative.

Specificity

Specificity for the μ -chain of mouse IgM is determined by Ouchterlony Double Diffusion (ODD). The antibody preparation is specific for mouse IgM when tested against purified mouse IgA, IgG (all subclasses), and IgM.

Identity and Purity

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.

Antibody Content

The product is provided with a specific antibody content of at least 1.0 mg/ml (prior to the addition of BSA).

Working Dilution: 1:256

The working dilution was determined by direct immunofluorescent labeling of mouse spleen cells. In order to obtain best results, it is recommended that each individual user determine the optimum working dilution for their system by titration assay.

F/P Molar Ratio: 3.9

A₂₈₀/A₄₉₆: 1.3 prior to the addition of 1% BSA

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

$$F = A_{496}/0.15 \quad P = \frac{A_{280} - (A_{496} \times 0.32)}{1.4}$$

$$\text{F/P Molar Ratio} = F/P \times 0.41$$

Where:

- 0.15 = The extinction coefficient of bound FITC at a concentration of 1 μ g per ml at pH 7.2
- 0.32 = The fluorochrome absorbance correction factor (non-protein absorbance).
- 0.41 = The factor for conversion of fluorochrome to protein ratios from weight to molar ratios.

Storage

For continuous use, store at 2-8°C. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is **not** recommended. Storage in "frost-free" freezers is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

*Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.