

3050 Spruce Street Saint Louis, Missouri 63103 USA Telephone (800) 325-5832 (314) 771-5765 Fax (314) 286-7828 email: techserv@sial.com sigma-aldrich.com

# **ProductInformation**

ANTI-MOUSE IgM (m-CHAIN SPECIFIC) FITC CONJUGATE Affinity Isolated Antigen Specific Antibody Antibody developed in Goat

Product No. F9259

## **Product Description**

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 (Product Code F 7250). Following conjugation, unbound FITC is removed by extensive dialysis.

Specificity for the  $\mu$ -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 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.

### Reagents

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.

## **Precautions and Disclaimers**

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.

# **Product Profile**

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

A minimum working dilution of 1:128 is 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: 3-5

 $A_{280}/A_{496}$ : 1.0-1.5 prior to the addition of 1% BSA

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

$$F = A_{496}/0.15 \quad P = \underline{A_{280} - (A_{496} \times 0.32)}/1.4$$
  
F/P Molar Ratio = F/P x 0.41

Where:

0.15 = The extinction coefficient of bound FITC at a concentration of 1 μg 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

Store at 2-8 °C for up to one month.

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.

Pcs2/00