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-Mouse IgG (whole molecule)—FITC produced in goat, affinity isolated antibody

Catalog Number F0257

## **Product Description**

Anti-Mouse IgG (whole molecule) is produced in goat using purified mouse IgG as the immunogen. Affinity isolated antibody is obtained from goat anti-mouse IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to mouse IgG. The antibody preparation is then conjugated to fluorescein isothiocyanate (FITC), Isomer I, Catalog Number F7250. Following conjugation, the FITC-antibody conjugate is extensively dialyzed to remove unbound FITC.

Specificity of the anti-mouse IgG antibodies for mouse IgG is determined by immunoelectrophoresis (IEP) and Ouchterlony double diffusion (ODD) with normal mouse serum and mouse IgG, prior to conjugation. The isolated anti-mouse IgG antibodies react with mouse IgG subclasses G1, Gg2a, G2b, and G3 as demonstrated by Ouchterlony double diffusion using mouse myeloma proteins.

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

#### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 15 mM sodium azide as a preservative.

## **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

Store at 2-8 °C. For extended storage, the solution may be frozen in working aliquots. 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.

#### **Product Profile**

The product is provided with an anti-mouse IgG specific antibody content of at least 1.0 mg/ml.

<u>Direct immunofluorescence</u>: a working dilution of 1:32 was determined using mouse spleen cells.

**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.

F/P Molar Ratio: 3.0-5.0

A<sub>280</sub>/A<sub>496</sub>: 1.0-1.5

The F/P molar ratio of the FITC-antibody conjugate is determined spectrophotometrically as follows:

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

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

F/P Molar Ratio = F/P x 0.41

Where:

0.15 = The extinction coefficient of bound FITC at a concentration of 1  $\mu$ 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.

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