

## Product Information

### ANTI-MOUSE IgG (WHOLE MOLECULE) FITC CONJUGATE

Affinity Isolated Antigen Specific Antibody  
Antibody Adsorbed with Human Serum Proteins

Product Number **F2012**

#### Product Description

Anti-mouse IgG is developed in goat using purified mouse IgG as the immunogen. Affinity isolated antigen specific 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 solid phase adsorbed with human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. The antibody preparation is then conjugated to Sigma Fluorescein Isothiocyanate (FITC), Isomer I (Product No. F 7250). 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, G2a, G2b, and G3 as demonstrated by Ouchterlony double diffusion using mouse myeloma proteins. Cross-reactivity of the antibody is determined by immunoelectrophoresis and ODD, prior to conjugation. The antibody shows no reactivity with human serum 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.

#### Reagents

The product is provided 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

Due to 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.

#### Storage/Stability

For continuous use, store at 2-8 °C for a maximum of 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.

#### Product Profile

The minimum working dilution of 1:64 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: between 3.0 and 5.0  
The F/P molar ratio of the FITC-antibody conjugate is determined spectrophotometrically as follows:  
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$$F = A_{496}/0.15 \quad P = \frac{A_{280} - (A_{496} \times 0.32)}{1.4}$$

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

Where:

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

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