ANTI-MOUSE IgG (Fc SPECIFIC)
FITC Conjugate
Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody
Adsorbed with Human IgG

Product No. **F5387**
Lot 097H4863

Antiserum is developed in goat using purified mouse IgG Fc fragment as the immunogen. Antibody is isolated from goat anti-mouse IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the Fc fragment of mouse IgG. The antibody preparation is solid phase adsorbed with human IgG to ensure minimal cross reactivity in tissue or cell preparations. Goat anti-Mouse IgG is conjugated to FITC and then purified by gel filtration to remove free FITC. The conjugate is provided as a solution in 0.01 M sodium phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Specificity
Specificity for the Fc fragment of mouse IgG is determined by immunoelectrophoresis (IEP). The antibody detects all mouse IgG subclasses, it shows no reactivity with mouse IgG Fab fragment or human IgG.

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

Working Dilutions
1. A dilution of 1:64 was determined by an indirect assay using monoclonal antibodies to human β_2-microglobulin (Sigma Product No. M7398) incubated with human peripheral blood lymphocytes.
2. A dilution of 1:100 was determined by indirect immunofluorescence on formalin-fixed, paraffin-embedded human tonsils using Mouse Monoclonal Anti-Human IgG (Sigma Product No. I5885) as the primary antibody.

In an agar diffusion assay the conjugate produces a precipitation arc at a dilution of 1:32 versus a 1:160 dilution of normal mouse serum.

Working Dilutions
Working dilutions should be determined by titration assay. Due to differences in assay systems, these titers may not reflect the user's actual working dilution.

Protein Concentration = 5.2 mg/ml by absorbance at 280 nm and 495nm ($E^{1\%}_{280}$ = 14.0, $E^{1\%}_{495}$ = 15.0).

F/P Molar Ratio: 4.8
The F/P molar ratio is determined spectrophotometrically as follows:

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

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.

Storage
For continuous use, 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.

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