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 IgG (Fc SPECIFIC)
FITC CONJUGATE
Affinity Isolated Antigen Specific Antibody
Adsorbed with Human IgG and Rat Serum Proteins

Product No. **F 5897**

Product Description

Antiserum 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, that do not specifically bind to the Fc fragment of mouse IgG. The antibody preparation is solid phase adsorbed with human IgG and rat serum proteins to ensure minimal cross reactivity in tissue or cell preparations. Goat anti-mouse IgG is conjugated to Fluorescein Isothiocyanate (FITC), in an alkaline reaction. The conjugate is further purified by gel filtration to remove unbound FITC. FITC Conjugated Goat Anti-Mouse IgG (Fc specific) is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

The FITC conjugated antibodies are determined to be specific for the Fc fragment of mouse IgG by immunoelectrophoresis (IEP) versus normal mouse serum, mouse IgG, the Fc fragment of mouse IgG and the Fab fragment of mouse IgG. By Ouchterlony Double Diffusion (ODD), no cross reaction with human or rat serum proteins is observed.

Identity and purity of the antibody is established by IEP. Electrophoresis of the antibody preparation followed by diffusion versus anti-goat IgG and anti-goat whole serum results in single arcs of precipitation.

The product may be used as a reagent in immunohistologic and immunocytologic reactions offering sensitive and specific activity to mouse IgG without cross reacting to immunoglobulins present on membrane or cell surfaces.

Product Profile

F/P Molar Ratio: 3.0-8.0
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 per 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.

In an agar diffusion assay the conjugate produces a precipitation arc at a minimum dilution of 1:8 versus a dilution of normal mouse serum.

1. A minimum dilution of 1:64 was determined by an indirect immunofluorescent assay using mouse monoclonal antibodies to Human β_2-Microglobulin (Sigma Product No. M 7398) as primary antibody, incubated with human peripheral blood lymphocytes.

2. A minimum dilution of 1:200 was determined by indirect immunofluorescent assay using formalin-fixed, paraffin-embedded human tonsils and Mouse Monoclonal Anti-Human IgG (Sigma Product No.
I 5885) as the primary antibody.

In order to obtain best results, it is recommended that each individual user determine their optimum working dilution by titration assay.

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

Storage

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.

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