

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 (Fab specific)-FITC

produced in goat, affinity isolated antibody adsorbed with human IgG and rat serum proteins

Catalog Number F8771

Product Description

Antiserum 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, that do not specifically bind to the Fab 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. Anti-Mouse IgG (Fab specific) is conjugated to fluorescein isothiocyanate (FITC), in an alkaline reaction. The conjugate is further purified by gel filtration to remove unbound FITC.

The FITC conjugated antibodies are determined to be specific for the Fab fragment of mouse IgG by immunoelectrophoresis (IEP) versus normal mouse serum, mouse IgG, the Fab fragment of mouse IgG and the Fc fragment of mouse IgG.

Identity and purity of the antibody is established by IEP. Electrophoresis of the antibody preparation followed by diffusion versus anti-goat IgG and antigoat 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.

Reagent

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

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

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

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, or storage in "frost-free" freezers. is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Note: Store product protected from light.

Product Profile

Protein concentration: 3.0-6.5 mg/ml

F/P Molar Ratio: 2.5-6.5

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

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

Where:

0.2 = The extinction coefficient of bound FITC at a concentration of 1 μ g 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.

<u>Immunofluorescence</u>: a minimum working dilution of 1:64 was determined using human peripheral blood lymphocytes and Monoclonal Anti- β_2 -Microglobulin, Catalog Number M7398, as primary antibody.

<u>Immunohistochemistry</u>: a minimum working dilution of 1:200 was determined using formalin-fixed, paraffinembedded human tonsil sections.

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

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