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Product Information

Anti-Goat IgG (whole molecule)—FITC produced in rabbit, IgG fraction of antiserum

Catalog Number F9012

Product Description

Anti-Goat IgG is produced in rabbit using purified goat IgG as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of antiserum. This fraction is essentially free of other rabbit serum proteins. Anti-Goat IgG is conjugated to fluorescein isothiocyanate (FITC) in an alkaline reaction, then further purified to remove unbound FITC.

The antiserum is determined to be immunospecific for goat IgG by immunoelectrophoresis versus normal goat serum and goat IgG, prior to conjugation.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion versus anti-rabbit IgG and anti-rabbit whole serum results in single arcs of precipitation in the gamma region.

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.

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

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

<u>Immunofluorescence</u>: a minimum working dilution of 1:200 was determined using human peripheral blood lymphocytes.

<u>Immunohistochemistry</u>: a minimum working dilution of 1:160 was determined using formalin-fixed, paraffinembedded human tonsil sections and Anti-Human IgG as the primary antibody.

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

F/P Molar Ratio: 2.5 to 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 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.

Protein Concentration = 10 - 20 mg/ml by absorbance at 280nm ($E_{280}^{1\%}$ = 14.0).

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