

**Product No. F-5512**  
**Lot 106H4825**

**Anti-Human IgG (Fab specific)**  
**FITC Conjugate**

Antibody developed in Goat  
Affinity Isolated Antigen Specific Antibody

Antiserum is developed in goat using purified human IgG, Fab fragment, as the immunogen. Antibody is isolated from goat anti-human IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the Fab fragment of human IgG. Goat anti-human 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 phosphate buffered saline, pH 7.4, containing 0.01% thimerosal as a preservative.

**Specificity**

Specificity for the Fab fragment of human IgG is determined by immunoelectrophoresis (IEP). The conjugate reacts with human serum, human IgG (whole molecule and Fab fragment), IgA, IgM and light chains and shows no reactivity with human IgG, Fc fragment. By Ouchterlony double diffusion (ODD) the product shows no cross reaction with normal mouse or rat serum proteins.

**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 results in single arcs of precipitation.

**Protein Concentration** = 4.8 mg/ml by absorbance at 280 nm and 495 nm ( $E_{280}^{1\%} = 14.0$ ,  $E_{495}^{1\%} = 15.0$ ).

**ABPT**

In an agar diffusion assay the conjugate produces a precipitation arc at a dilution of 1:16 versus a 1:80 dilution of normal human serum.

**Titers**

1. A dilution of 1:32 was determined by indirect immunohistology using an Anti-Nuclear Antibody (A.N.A.) assay on acetone-fixed mouse liver cells and A.N.A. positive serum as the primary antibody.
- 2.. A dilution of 1:32 was determined by direct immunohistology using human peripheral blood lymphocytes.

In order to obtain best results, it is recommended that each user determine the optimal working dilution for individual applications by titration assay.

**F/P Molar Ratio:** 3.4

$A_{280}/A_{495}$ : 1.2

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

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

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.

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

**Storage**

For continuous use, store at 2-8°C. 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.