

**ANTI-RAT IgG (WHOLE MOLECULE)**

**FITC Conjugate**

Affinity Isolated Antigen Specific Antibody  
Adsorbed with Human IgG

Product No. **F-1763**

Lot No. 028H4834

Antiserum is developed in rabbit using purified rat IgG as the immunogen. Antibody is isolated from rabbit anti-rat IgG antiserum by immunospecific purification which removes essentially all rabbit serum proteins, including immunoglobulins, which do not specifically bind to bovine IgG. The antibody preparation is solid phase adsorbed with human IgG to ensure minimal cross reactivity in tissue or cell preparations. Rabbit Anti-Rat IgG is conjugated to fluorescein isothiocyanate (FITC). Free FITC is removed by gel filtration. The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, with 15mM sodium azide as a preservative.

**Specificity**

Specificity of the anti-rat IgG antibodies for rat IgG is determined by immunoelectrophoresis (IEP), prior to conjugation, using normal rat serum and rat IgG. No cross reaction with human IgG is observed.

**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-rabbit IgG and anti-rabbit whole serum results in single arcs of precipitation.

**Working Dilution**

1. A dilution of 1:320 was determined by indirect immunofluorescent labeling of formalin-fixed, paraffin-embedded human tonsil sections using rat anti-human IgG as the primary antibody.

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

**Protein Concentration:** 4.1 mg/ml by absorbance at 280 nm and 495 nm ( $E_{280}^{1\%} = 14.0$ ).

**F/P Molar Ratio:** 3.5

The F/P Molar ratio of FITC-Antibody conjugates 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/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.

**Agar Block Precipitation Titer (ABPT)**

In an agar diffusion assay, the conjugate produces a precipitation arc at a dilution of 1:64 versus a 1:640 dilution of normal rat serum.

**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.

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