

**Product No. F-9637**  
**Lot 114H4809**

**Anti-Human IgA ( $\alpha$ -chain specific)**  
**FITC Conjugate**  
Affinity Isolated Antigen Specific Antibody  
Antibody Developed in Goat

Anti-Human IgA is developed in goat using purified human IgA as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-human IgA antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to  $\alpha$ -chain of human IgA. Goat Anti-Human IgA is then conjugated to crystalline Fluorescein Isothiocyanate (FITC), in an alkaline reaction, then further purified 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  $\alpha$ -chain of human IgA is determined by Ouchterlony Double Diffusion (ODD). The antibody preparation is specific for human IgA when tested against purified human IgA, IgG, IgM, Bence Jones Kappa and Lambda myeloma proteins.

**Identity and Purity**

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), 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.

**Working Dilutions**

1. Working dilution by fluorescent dot immunobinding assay (DIBA) using 4-8  $\mu$ g of human IgA/dot is 1:64.
2. Working dilution by Particle Immunofluorescence Assay (PIFA) using a 50  $\mu$ l suspension of human IgA-Agarose is 1:64.

3. Strong reactivity with human IgA has been determined by immunoelectrophoresis (IEP) using a 1:8 dilution of the product and antigen concentration of 1 mg/ml.

In order to obtain best results it is recommended that each individual user determine working dilutions by titration assay.

**Protein Concentration** = 4.4 mg/ml

**F/P Molar Ratio:** 4.4

$A_{280}/A_{495}$ : 0.85

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 $\mu$ g/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 1:16 versus a 1:10 dilution of normal human serum.

## **Storage**

For continuous use, store at 0-5°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.

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