

Product No. F-2879
Lot 017H8975

Anti-Human IgA (α -chain specific)
FITC Conjugate
Antibody developed in Goat
IgG Fraction of Antiserum

Anti-Human IgA is developed in goat using IgA isolated from pooled normal human colostrum 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 goat serum proteins. Goat anti-human IgA is conjugated to Sigma Fluorescein Isothiocyanate (FITC, Sigma Product No. F-7250). Following conjugation the FITC-antibody conjugate is extensively dialyzed to remove free FITC. The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide (see MSDS)* as a preservative.

Specificity

Specificity for the α -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 Bence Jones 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 in the gamma region.

Working Dilution

The working dilution was determined to be 1:32 by direct immunofluorescent labeling of human peripheral blood lymphocytes.

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

F/P Molar Ratio: 5.0

A₂₈₀/A₄₉₆: 1.1

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

$$F = A_{496}/0.15 \quad P = \frac{A_{280} - (A_{496} \times 0.32)}{1.4}$$

F/P Molar Ratio = F/P x 0.41

Where:

- 0.15 = The extinction coefficient of bound FITC at a concentration of 1 μ g per ml at pH 7.2
- 0.32 = The fluorochrome absorbance correction factor (non-protein absorbance).
- 0.41 = The factor for conversion of fluorochrome to protein ratios from weight to molar ratios.

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.

*Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.