

Product No. F-0132
Lot 036H8932

Anti-Human IgG (γ -chain specific)
FITC Conjugate
Affinity Isolated Antigen Specific Antibody
Antibody Developed in Goat

Anti-Human IgG is developed in goat using purified human IgG as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-human IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to γ -chain of human IgG. Goat Anti-Human IgG is then conjugated to Sigma Fluorescein Isothiocyanate (FITC), Isomer I (Sigma Product No. F-7250). Following conjugation, unbound FITC is removed by extensive dialysis. The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 0.1% sodium azide (see MSDS)* as a preservative.

Specificity

Specificity for the γ -chain of human IgG is determined by Ouchterlony Double Diffusion (ODD). The antibody preparation is specific for human IgG 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.

Antibody Content

The product is provided with a specific antibody content of 1.1 mg/ml (prior to the addition of BSA).

Working Dilution: 1:32

The working dilution was determined by direct immunofluorescent labeling of human peripheral blood lymphocytes.

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

F/P Molar Ratio: 4.5

A_{280}/A_{496} : 1.17 prior to the addition of 1% BSA

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

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

$$\text{F/P Molar Ratio} = F/P \times 0.41$$

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.

Reference

1. Becker, W., *Immunochemistry*, **6**, 539 (1969).

*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.

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.

Sigma warrants that its products conform to the information contained in this and other Sigma publications. Purchaser must determine the suitability of the products for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale. Issued 4/96