

Product No. F-6762
Lot 017H8980

Anti-Biotin
FITC Conjugate

Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody

Antiserum is developed in goat using biotin conjugated to carrier protein as the immunogen. Affinity isolation removes essentially all goat serum proteins, including immunoglobulins which do not specifically bind to biotin including antibodies to carrier protein. Goat anti-Biotin 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 15 mM sodium azide (see MSDS)* as a preservative.

Specificity

Specificity of the anti-biotin is determined by immunoelectrophoresis, prior to conjugation, versus biotin carrier protein conjugate and free carrier protein. No reactivity with free carrier protein is observed.

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 at least 1.0 mg/ml (prior to the addition of BSA).

Working Dilution: 1:100

The working dilution was determined by indirect immunofluorescent labeling using formalin-fixed, paraffin-embedded human tonsil sections and Biotin Conjugated Goat Anti-Human IgG (Sigma Product No. B 1140) as the primary antibody.

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 04/97.

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

F/P Molar Ratio: 4.4

A₂₈₀/A₄₉₆: 1.2 (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 µg 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.