

Product Information

Anti-Human Kappa Light Chain (Bound and Free) FITC antibody produced in goat Affinity Isolated Antibody

Catalog Number **F3761**

Product Description

Antiserum is developed in goat using purified Bence Jones-kappa myeloma protein as the immunogen. Affinity isolated antigen specific antibody is obtained from antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the kappa light chain (bound and free). Goat anti-kappa light chain is conjugated to Sigma Fluorescein Isothiocyanate (FITC), Isomer I (Catalog Number F7250). Following conjugation, unbound FITC is removed by extensive dialysis.

Specificity for the kappa chain of human immunoglobulins is determined by ELISA. Reactivity against a 5 mg/ml coat of Human IgG^{*}, Human IgA^{*}, and Human IgM^{*} must be <10% of the reactivity to Human IgGk^{*}, Human IgAk^{*}, and Human IgMk^{*}, respectively. Reactivity against a 200 ng/ml coat of Human Bence Jones Lambda must be <10% of the reactivity to a 200 ng/ml coat of Human Bence Jones Kappa.

*Any subclass is acceptable.

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.

Reagents

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 as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2–8 °C. If slight turbidity occurs on prolonged storage, clarify by centrifugation before use.

Product Profile

The conjugate is provided with an antibody content of at least 1.0 mg/ml.

Direct Immunofluorescent: A minimum working dilution of 1:16 is determined by labeling of human peripheral blood lymphocytes.

Note: 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: 3.0-5.0 prior to the addition of 1% BSA
The F/P molar ratio is determined spectrophotometrically as follows:

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

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

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.

Reference

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

TT,PCS,MAM 11/18-1