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ProductInformation

ANTI-HUMAN IgM (μ-CHAIN SPECIFIC)
FITC CONJUGATE
Antibody Developed in Goat
Affinity Isolated Antigen Specific Antibody

Product Number **F 5384**

Product Description

Anti-Human IgM (μ-chain specific) is developed in goat using purified human IgM as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-human IgM antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the μ-chain of human IgM. Goat anti-human IgM is conjugated to Sigma Fluorescein Isothiocyanate (FITC), Isomer I (Product No. F 7250). Following conjugation, unbound FITC is removed by extensive dialysis.

Specificity for the μ-chain of human IgM is determined by Ouchterlony Double Diffusion (ODD). The antibody preparation is specific for human IgM when tested against purified human IgA, IgG, IgM, Bence Jones Kappa, and Bence Jones Lambda myeloma proteins.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion against 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 0.1% sodium azide as a preservative.

Precautions and Disclaimer

Due to 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/Stability

For continuous use, store at 2-8 °C for up to one month. 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.

Product Profile

The working dilution was determined by direct immunofluorescent labeling (minimum 1:16) 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: 3.0-5.0
The F/P molar ratio of the FITC-antibody conjugate is determined spectrophotometrically as follows:

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

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

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.

References

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

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