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ProductInformation

ANTI-HUMAN POLYVALENT IMMUNOGLOBULINS (IgA, IgG, IgM)
FITC CONJUGATE
Antibodies Developed in Goat
IgG Fraction of Antisera

Product Number **F 6506**

Product Description

Individual antisera to human IgA, IgG, and IgM are developed in goats using purified human IgA, IgG, and IgM as the immunogens. Whole antisera are fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of each antiserum. This fraction is essentially free of other goat serum proteins. Each fraction is then conjugated to Fluorescein Isothiocyanate (FITC), Isomer I (Product No. F 7250). Following conjugation, unbound FITC is removed by extensive dialysis.

Specificity for each immunoglobulin is determined by immunoelectrophoresis (IEP) versus 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 versus anti-goat IgG and anti-goat whole serum result in single arcs of precipitation in the gamma region.

Reagents

The conjugates are pooled and provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

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.

This product is for R & D use only.

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

A minimum titer of 1:128 is determined by direct immunofluorescent labeling of human peripheral blood lymphocytes.

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

Protein Concentration: 10-20 mg/ml by absorbance at 280 nm ($E^{1\%}_{280}$ = 14.0)

F/P Molar Ratio: 3-5
A_{280}/A_{496}: 1.0-1.5

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

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

F/P Molar Ratio = F/P x 0.41
Where:
0.15 = The extinction coefficient of bound FITC at a concentration of 1 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.

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