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Product Information

Anti-Human Polyvalent Immunoglobulins (G, A, M)-Peroxidase
antibodies produced in goat, affinity isolated antibody

Catalog Number **A8400**

Product Description

Individual antisera to human IgA, IgG, and IgM are produced in goat using purified human IgA, IgG, and IgM as the immunogens. Affinity isolated antibodies are obtained from goat antiserum by immunospecific purification, which removes essentially all goat serum proteins, including immunoglobulins, that do not specifically bind to the heavy chains (α,γ, μ) of human IgG, IgA and IgM. Each specific antibody is then conjugated to horseradish peroxidase, Catalog Number P8375, by a modification of the periodate method of Wilson and Nakane.[1]

Specificity is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for human IgG, IgA and IgM when tested against human IgA, IgG, IgM, Bence Jones Kappa, and Lambda myeloma proteins.

Identity and purity of the antibodies are established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparations followed by diffusion versus anti-goat IgG and anti-goat whole serum results in single arcs of precipitation.

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with preservative.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

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, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

We are now reporting lot specific information as a titer by direct ELISA rather than as a working dilution. Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 450 nm after 30 minutes of substrate conversion at 25 °C.[2]

Multiwell plates are individually coated with purified human IgA, IgG, or IgM at a concentration of 5 µg/mL in 0.05 M carbonate/bicarbonate buffer, pH 9.6.

Carbonate/Bicarbonate Buffer capsules, Catalog No. C3041.

Substrate: o-Phenylenediamine dihydrochloride (OPD), Catalog No. P8287, 0.4 mg/mL in 0.05 M phosphate-citrate buffer, pH 5.0, containing 0.03% sodium perborate

Phosphate-Citrate Buffer with Sodium Perborate capsules, Catalog No. P4922.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration.

References

1. Wilson, M. and Nakane, P., Immunofluorescence and Related Staining Techniques (Elsevier-North Holland BioMedical Press, Amsterdam), p. 215 (1978).
2. Voller, A., et al., Bull. World Health Organ, **53**, 55 (1976).

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