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Product Information

Anti-Human IgG (γ -chain specific)-Alkaline Phosphatase

produced in goat, affinity isolated antibody

Catalog Number A3150

Product Description

Anti-Human IgG (γ -chain specific) is produced in goat using purified human IgG as the immunogen. The antibody is isolated from goat anti-human IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, that do not specifically bind to the γ -chain of human IgG. Anti-Human IgG is conjugated to alkaline phosphatase, Type VII-S, Catalog Number P7923, by protein cross linking with 0.2% glutaraldehyde. ¹

Specificity of Anti-Human IgG (γ -chain specific)-Alkaline Phosphatase is determined by ELISA. The conjugate is specific for human IgG when tested against human IgA, IgG, IgM, Bence Jones Kappa, and Lambda myeloma proteins.²

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 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 1 mM MgCl₂, 15 mM sodium azide and 50% glycerol.

Precautions and Disclaimer

This product is 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. Do Not Freeze.

Product Profile

<u>Direct ELISA</u>: titer 1:7,000-1:21,000 We are now reporting lot specific information as a titer 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 405 nm after 30 minutes of substrate conversion at 25 °C.³

Microtiter plates are coated with purified human IgG at a concentration of 5 μ g/ml in 0.05 M carbonate/bicarbonate buffer, pH 9.6. Carbonate/ Bicarbonate Buffer capsules are available as Catalog Number C3041.

Substrate: *p*-Nitrophenyl Phosphate (pNPP), Catalog Number N2765, 1.0 mg/ml in 10% diethanolamine buffer, pH 9.8, containing 0.5 mM MgCl₂.

Note: Working dilution should be determined by titration assay. Due to product improvement and changes in the assay procedure, we now list a lot specific titer by direct ELISA for this product. Due to differences in assay systems, this titer may not reflect the user's actual working dilution.

References

- 1. Avrameas, S., Immunochemistry, 6, 43 (1969).
- 2. Engvall, E., et al., *Biochim. Biophys. Acta*, **251**, 427 (1971).
- 3. Voller, A., et al., *Bull. World Health Organ.* **53**, 55 (1976).

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