3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

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

produced in goat, affinity isolated antibody

Catalog Number A3187

Product Description

Antiserum is produced in goat using purified human IgG as the immunogen. The antibody is isolated from 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 by protein cross-linking with 0.2% glutaraldehyde. ¹

Specificity of Anti-Human IgG-Alkaline Phosphatase is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for human IgG when tested against human IgA, IgG, IgM, Bence Jones kappa, and 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 results in single arcs of precipitation.

Reagent

Supplied as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% bovine serum albumin, 1 mM $MgCl_2$, 50% glycerol, 10 mM glycine, and 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 Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage

Store at 2-8 °C.

Product Profile

Minimum Titer

1:30,000 by direct ELISA against 5 μ g/mL Human IgG using P-nitrophenyl phosphate (Cat. No. N2765) as substrate.

1:30,000 by direct dot blot against 1 mg human IgG using BCIP/NBT, SIGMAFASTTM Tablets (Cat. No. B5655) as substrate.

1:50 By Immunoblotting against formalin-fixed, paraffinembedded human tonsil sections using, (SIGMAFAST Cat. Nos. F4523 or F4648), Fast Red TR.AS-MX Napthol Phosphate as substrate.

1:30,000 by immunoblotting against 10 μg electrophoretically separated human IgG using BCIP/NBT (SIGMA*FAST* Tablets, Cat. No. B5655) as substrate.

Note: Working dilutions should be determined by titration assays. Due to differences in assay systems, these titers may not reflect the user's actual working dilution.

 ${\sf SIGMAFAST}$ is a trademark of Sigma-Aldrich Biotechnology LP and Sigma-Aldrich Co.

References

- 1. Avrameas, S., Immunochemistry, 6, 43 (1969).
- 2. Voller, A., et al., *Bull. World Health Organ.*, **53**, 55 (1976).
- 3. Pluzek, K.J., and R. Ramlau, Alkaline Phosphatase Labeled Reagents, in CRC Handbook of Immunoblotting of Proteins, O.J. Bjerrum and N.H.H. Heegaard, Eds., CRC Press Inc., Boca Raton, FL, 1, p. 177, 1988.

TD,KAA,PHC 05/09-1