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 IgA (α-chain specific)—Alkaline Phosphatase produced in goat, affinity isolated antibody

Catalog Number A3400

Product Description

Antiserum is produced in goat using purified human IgA as the immunogen. Affinity isolated antibody is obtained from anti-human IgA antiserum by immunospecific purification which removes essentially all serum proteins, including immunoglobulins, which do not specifically bind to the α -chain of human IgA. Conjugation of the antibody preparation to alkaline phosphatase is accomplished by protein cross-linking with 0.2% glutaraldehyde. 1

Specificity of Anti-Human IgA-Alkaline Phosphatase is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for human IgA 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

Provided as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 50% glycerol, 1 mM $MgCl_2$, and 15 mM sodium azide as a preservative.

Precautions

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

We are now reporting lot specific information as a titer by direct ELISA (titer ranging from 1:7000 -1:21000) 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 $^{\circ}\text{C}^{\ 2}.$ Microtiter plates are coated with purified human IgA at a concentration of 5 $\mu\text{g/ml}$ in 0.05 M carbonate/bicarbonate buffer, pH 9.6

Carbonate-Bicarbonate Buffer capsules are available as Cat. No. C3041.

Substrate: *p*-Nitrophenyl Phosphate (pNPP), Cat. No. N2765, 1.0 mg/mL in 10% diethanolamine buffer, pH 9.8, containing 0.5 mM MgCl₂.

References

- 1. Avrameas, V., Immunochemistry, 6, 43 (1969).
- 2. Voller, A., et al., Bulletin WHO, 53, 55 (1976).

IDC,PHC 12/11-1