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-Rat IgG (whole molecule)–Alkaline Phosphatase
produced in rabbit, affinity isolated antibody

Catalog Number **A6066**

Product Description

Antiserum is produced in rabbit using purified rat IgG as the immunogen. The affinity isolated antibody is obtained from anti-rat IgG antiserum by immunospecific purification, which removes essentially all rabbit serum proteins, including immunoglobulins, which do not specifically bind to rat IgG. Anti-Rat IgG is conjugated to alkaline phosphatase by protein cross linking with 0.2% glutaraldehyde.[1]

Identity and purity of the antibody is established by immunoelectrophoresis (IEP) prior to conjugation. Electrophoresis of the product followed by diffusion versus anti-rabbit IgG and anti-rabbit whole serum results in single arcs of precipitation.

Reagent

Supplied as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 1 mM $MgCl_2$, 50% glycerol, 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/Stability

Store at 2-8 °C.

Product Profile

Direct ELISA:: minimum titer 1:30,000
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.[2]
Multiwell plates are coated with purified rat IgG at a concentration of 5 µg/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 $MgCl_2$.

Immunohistochemistry: 1:50-1:100
Titer was determined by indirect assay using formalin fixed paraffin embedded human tonsil sections and rat Monoclonal Anti-Human IgG as primary antibody.

Substrate: Fast Red TR/Naphthol AS-MX Phosphate[3] SIGMA*FAST*™ Tablets, Catalog Nos. F4523 or F4648.

Western Blotting: 1:30,000-1:60,000
detecting rat primary antibody using total cell extract of PC-12 Rat pheochromocytoma cells (5-10) µg per well

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.

References

1. Avrameas, V., *Immunochemistry*, **6**, 43, (1969).
2. Voller, A., et al., *Bulletin World Health Organ*, **53**, 55 (1976).
3. Pluzek, K.J., and Ramlau, R., 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.

DS,KAA,PHC 08/12-1