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Product Information

Anti-Mouse IgG (Fab specific)-Alkaline Phosphatase
produced in goat, affinity isolated antibody,
adsorbed with bovine, horse and human serum proteins

Catalog Number **A2179**

Production Description
Antiserum is produced in goat using purified mouse IgG, Fab fragment, as the immunogen. Antibody is isolated from anti-mouse IgG antiserum by immunospecific purification, which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the Fab fragment of mouse IgG. Anti-Mouse IgG is conjugated to alkaline phosphatase by protein cross-linking with 0.2% glutaraldehyde. The antibody preparation is solid phase adsorbed with human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. Solid phase adsorption with bovine and horse serum proteins ensures minimal cross reactivity with horse or fetal calf serum in hybridoma media.

Specificity of Anti-Mouse IgG-Alkaline Phosphatase is determined by ELISA. The conjugate is specific for mouse IgG and mouse IgG, Fab fragment. Cross reactivity of the antibody conjugate is also determined by ELISA. The conjugate shows no reactivity with mouse IgG, Fc fragment, human IgG, IgA, IgM, κ and λ light chain, bovine IgG and IgM, or horse IgG.

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 $MgCl_2$, with 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
Direct ELISA: titer 1:40,000
Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 400 nm after 30 minutes of substrate conversion at 25 °C [1].

Microtiter plates are coated with purified mouse 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 Cat. No. C3041.

Substrate: *p*-Nitrophenyl Phosphate (pNPP) Catalog Number N2765, 1.0 mg/mL in 10% diethanolamine buffer, pH 9.8, containing 0.01% $MgCl_2$ and 0.2% sodium azide.

Immunoblotting (chemiluminescent): 1:80,000:.

Immunohistology
A minimum working dilution of 1:25 was determined in an indirect assay using formalin- fixed, paraffin-embedded human tonsil and Monoclonal Anti-Actin, α–Smooth Muscle, Catalog Number A 2547, as the primary antibody.

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

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet USDA requirements.

Reference
1. Voller, A., et al., Bulletin WHO, **53**, 55 (1976).

PHC 06/11-1

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