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Product Information

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

Catalog Number **A1682**

Product Description

Anti-Mouse IgG (Fab specific) is produced in goat using purified mouse IgG as the immunogen. Affinity isolated antibody is obtained from anti-mouse IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, that do not specifically bind to the Fab fragment of mouse IgG. The antibody preparation is solid phase adsorbed with human IgG and rat serum proteins to ensure minimal cross reactivity in tissue or cell preparations. Anti-Mouse IgG is conjugated to alkaline phosphatase by protein cross-linking with 0.2% glutaraldehyde.

Specificity of the conjugate is determined by immunoelectrophoresis (IEP) and ELISA. By IEP prior to conjugation versus normal mouse serum, mouse IgG (whole molecule), the Fc fragment of mouse IgG and the Fab fragment of mouse IgG, the antibody is specific for mouse IgG and shows no reaction with the Fc fragment of mouse IgG. The conjugate only shows reactivity with mouse IgG (whole molecule) and the Fab fragment of mouse IgG, when tested in an ELISA. The conjugate shows no reaction with the Fc fragment of mouse IgG, human IgG, IgA, IgM or rat IgG in an ELISA.

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.

The product may be used as a reagent in immuno-histological studies, offering sensitive and specific activity for all mouse IgG heavy chain subclasses without cross reactivity to human IgG or rat serum proteins. Because of the minimal interspecies cross reactivity, this product is excellent for use in enzyme immunoassays or dot blotting in the presence of human or rat serum or plasma.

Reagent

Supplied 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.

Product Profile

Direct ELISA: a minimum titer of 1:40,000
We are now reporting lot specific information as a titer by direct ELISA 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 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 Catalog Number 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: a working dilution of 1:200.000 - 1:400,000 is determined using an immunoblot assay detecting ß-Actin in total cell extract of HeLa cells (5-10 ug per well)

Immunohistochemistry; a minimum working antibody dilution of 1:40 is determined by an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Monoclonal Anti-Actin, α-Smooth Muscle, Catalog Number A2547, 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.

Storage
Store at 2-8 °C.

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

Reference
1. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).

MG,KAA,PHC 02/10-1

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