Product Information

Anti-Mouse IgG (Fc Specific)-Peroxidase Antibody

Produced in Goat, Affinity Isolated Antibody, Buffered Aqueous Solution

A9309

Product Description

Anti-Mouse IgG (Fc 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 Fc 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 peroxidase by protein cross linking with 0.2% glutaraldehyde.

Specificity of the conjugate is determined by immuno-electrophoresis (IEP) and ELISA. By IEP, against normal mouse serum, mouse IgG (whole molecule), the Fc fragment of mouse IgG and the Fab fragment of mouse IgG, the conjugate is specific for mouse IgG and shows no reaction with the Fab fragment of mouse IgG. The conjugate only shows reactivity with mouse IgG (whole molecule) and the Fc fragment of mouse IgG, when tested in ELISA. The conjugate shows no reaction with the Fab fragment of mouse IgG, human IgG, IgA, IgM, or rat IgG in 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.

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.05% MIT as a preservative.

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

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Direct ELISA

Minimum 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 450 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: *o*-Phenylenediamine Dihydrochloride (OPD), Cat. No. P8287, 0.4 mg/mL in 0.05 M phosphate-citrate buffer, pH 5.0 containing 0.03% sodium perborate.

Phosphate-Citrate Buffer with Sodium Perborate capsules are available as Cat. No. P4922.

Immunoblotting

A working antibody dilution of 1:40.000-1:80,000 is determined using immunoblot assay detecting β-actin in total cell extract of HeLa cells (5-10 µg per well.)

Immunohistochemistry

A minimum antibody dilution of 1:200 was determined by an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Monoclonal Anti-Human IgG (Cat. No. I5885) as the primary antibody.

Agar Block Precipitin Titration

In an agar diffusion assay the conjugate produces precipitation arcs at a minimum 1:8 dilution against a dilution of mouse serum.

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.

References

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

Notice

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