Product Information

Anti-Mouse IgG (Fab Specific)-Peroxidase Antibody

Produced in Goat, Affinity Isolated Antibody, Buffered Aqueous Solution

A3682

Product Description

Anti-Mouse IgG (Fab specific) is produced in goat using as immunogen purified mouse IgG, Fab fragment. Affinity isolated antibody is obtained from goat 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. 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 horseradish peroxidase by protein cross linking with glutaraldehyde.

Specificity of Anti-Mouse IgG (Fab specific)-Peroxidase is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for mouse IgG and the Fab fragment of mouse IgG. It will react with all mouse IgG subclasses (G1, G2a, G2b and G3) and with mouse IgA, IgM and IgE. Cross reactivity of the antibody-conjugate is also determined by ELISA. The conjugate shows no reactivity with the Fc fragment of mouse IgG or with human and rat IgG.

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 is a very sensitive and specific reagent for immunoenzymatic techniques such as ELISA, immunohistochemical studies, and dot or immuno-blotting. This conjugate offers the advantage of low background and increased sensitivity for mouse immunoglobulins without cross reactivity to human or rat immunoglobulins present on membrane or cell surfaces.

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

The product may be stored at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots at −20 °C. 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 1:60,000

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 1:80.000-1:160,000 is determined using immunoblot assay detecting β-actin in total cell extract of HeLa cells (5-10 µg per lane)

Immunohistology

A minimum working antibody dilution of 1:150 was determined by an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Monoclonal Anti-α-Smooth Muscle Actin, Cat. No. 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.

References

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

Notice

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