



Product Information

Anti-Mouse IgG (Fab Specific) Peroxidase Conjugate

Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody
Adsorbed with Human IgG

Product Number **A 9917**

Product Description

Anti-mouse IgG (Fab specific) is developed in goat using purified mouse IgG Fab fragment as the immunogen. The antibody is isolated 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 to ensure minimal cross reactivity in tissue or cell preparations. Goat anti-mouse IgG is conjugated to peroxidase by protein cross-linking with 0.2% glutaraldehyde.

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 result in single arcs of precipitation.

Reagent

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.01% thimerosal as a preservative.

Precautions and Disclaimer

This product is for research use only. Consult the MSDS 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 is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Specificity of the Peroxidase Conjugated Anti-Mouse IgG is determined by immunoelectrophoresis, prior to conjugation. By IEP, single precipitation arcs are observed against normal mouse serum, mouse IgG and the Fab fragment of mouse IgG, while no reaction is observed against the Fc fragment of mouse IgG or human IgG.

Enzyme Activity

Minimum 150 purpurogallin units/ml. Enzyme activity is determined using 5% Pyrogallol (Product No. P 0381) in water, pH 6.0, at 20 °C. One purpurogallin unit will form 1 mg of purpurogallin from pyrogallol in 20 seconds at pH 6.0, 20 °C.

Titers

1. A minimum titer of 1:60,000 is determined by Direct Elisa. 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

Multiwell 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 Product No. C 3041).

Substrate: o-Phenylenediamine dihydrochloride (OPD, Product No. P 8287), 0.4 mg/ml in 0.05 M phosphate-citrate buffer, pH 5.0, containing 0.03% sodium perborate (Phosphate-Citrate Buffer Bapsules with Sodium Perborate are available as Product No. P 4922).

2. Dot Blot

- a. A minimum dilution of 1:8,000 was determined in a direct assay using 40 ng of mouse IgG/dot.
- b. A minimum dilution of 1:8,000 was determined in an indirect assay using 20 ng of human IgG/dot and Mouse Monoclonal Anti-Human IgG (Sigma Product No. I 5885) as the primary antibody.
- c. In an indirect chemiluminescence system using 20 ng of human IgG/dot and Mouse Monoclonal Anti-Human IgG (Product No. I 5885) as the primary antibody, this product was determined to have a minimum dilution of 1:80,000 when used as secondary antibody. Luminol plus enhancer was used as substrate.

3. Immunohistology

A minimum dilution of 1:150 was determined in an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Mouse Monoclonal Anti-Human IgG (Sigma Product No. I 885) as the primary antibody.

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).

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