

Product Information

Anti-Mouse IgG (γ-Chain Specific) Peroxidase Conjugate

Antibody Developed in Goat
Affinity Isolated Antigen Specific Antibody

A3673

Product Description

Antiserum is developed in goat using purified mouse IgG as the immunogen. Affinity isolated antigen specific 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 γ-chain of mouse IgG. Goat anti-mouse IgG is conjugated to Sigma Horseradish Peroxidase, Type VI by a modification of the periodate method of Wilson and Nakane.¹

Specificity of the Peroxidase Conjugated Anti-Mouse IgG is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for mouse IgG when tested against purified mouse IgA, IgG, and IgM myeloma proteins.

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.

Reagents

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 0.1% Kathon™ as a preservative.

Precautions and Disclaimer

Consult the SDS for information regarding hazards and safe handling practices.

Product Profile

A minimum titer of 1:15,000 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.² 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 Capsules with Sodium Perborate are available as Cat. No. P4922).

Working dilution should be determined by titration assay. Due to differences in assay systems, this titer may not reflect the user's actual working dilution.

Storage

For continuous use, 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.

References

1. Wilson, M. and Nakane, P., Immunofluorescence and Related Staining Techniques, Elsevier/North Holland Biomedical Press, Amsterdam, p. 215 (1978).
2. Voller, A., et al., Bull. World Health Organ., **53**: 55 (1976).

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