Product Information

Anti-Rabbit IgG (Whole Molecule) Peroxidase Conjugate

Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody
Antibody Adsorbed with Human Serum Proteins

A4914

Product Description

Anti-Rabbit IgG (whole molecule) is developed in goat using purified rabbit IgG as the immunogen. Antibody is isolated from goat anti-rabbit IgG antiserum by immunospecific purification that removes essentially all goat serum proteins, including immunoglobulins that do not specifically bind to rabbit IgG. The antibody preparation is solid phase adsorbed with normal human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. Goat anti-Rabbit is conjugated to Sigma Horseradish Peroxidase, Type VI (Cat. No. P 8375) by a modification of the periodate method of Wilson and Nakane.[1]

Specificity of the peroxidase conjugated anti-rabbit IgG is determined by Enzyme Linked Immunosorbent Assay (ELISA). Cross reactivity of the antibody-conjugate is also determined by ELISA. The conjugate shows no reactivity with human serum 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 preservative.

Precautions and Disclaimer

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

Product Profile

We are now reporting lot specific information as a titer by direct ELISA (minimum 1:10,000) 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.[2] Microtiter plates are coated with purified rabbit 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. C 3041).

Substrate: *o*-Phenylenediamine dihydrochloride (OPD, Cat. 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 Capsules with Sodium Perborate are available as Cat. No. P 4922).

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

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