Product Information

Anti-Bovine IgG (Whole Molecule)-Peroxidase Antibody Produced in Rabbit

IgG Fraction of Antiserum, Buffered Aqueous Solution

A8917

Product Description

Antiserum is produced in rabbit using purified bovine IgG as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of antiserum. This fraction is essentially free of other rabbit serum proteins. Anti-Bovine IgG is then conjugated to peroxidase by protein cross-linking with 0.2% glutaraldehyde.

Specificity of the Anti-Bovine IgG (whole molecule)-Peroxidase is determined by immunoelectrophoresis (IEP) versus normal bovine serum and bovine IgG.

Identity and purity of the antibody is established by immunoelectrophoresis prior to conjugation. Electrophoresis of the product followed by diffusion versus the anti-rabbit IgG and the anti-rabbit whole serum results in single arcs of precipitation in the gamma region.

Reagent

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

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

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, 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

Antibody concentration: 10-20 mg/mL

Molar Ratio (IgG/:Peroxidase): 0.7-1.5

In an agar diffusion assay the conjugate produces a precipitation arc at a minimum dilution of 1:32 versus a dilution of bovine serum.

Direct ELISA

Minimum 1:20,000

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 bovine 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).

Dot Blot

In an indirect chemiluminescence system using 5 ng IgG/dot and bovine anti-rabbit IgG as the primary antibody, this product was determined to have a dilution of 1:80,000 when used as secondary antibody. Luminol plus enhancer was used as substrate.

Immunohistology

A minimum dilution of 1:1,000 was determined by an indirect assay using formalin-fixed, paraffin-embedded rabbit spleen and bovine anti-rabbit IgG 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.

Reference

1. Voller, A., et al., *Bulletin WHO*, **53**: 55 (1976).

Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Technical Assistance

Visit the tech service page at SigmaAldrich.com/techservice.

Standard Warranty

The applicable warranty for the products listed in this publication may be found at SigmaAldrich.com/terms.

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

A8917dat Rev 05/21