

Product Information

Anti-Bovine IgG (whole molecule)–Alkaline Phosphatase

produced in rabbit, affinity isolated antibody

Catalog Number **A0705**

Product Description

Anti-Bovine IgG (whole molecule) is produced in rabbit using purified bovine IgG as the immunogen. Affinity isolated antibody is obtained from Anti-Bovine IgG antiserum by immunospecific purification which removes essentially all rabbit serum proteins, including immunoglobulins, which do not specifically bind to bovine IgG. Anti-Bovine IgG is conjugated to alkaline phosphatase by protein cross linking with 0.2% glutaraldehyde.¹

Specificity of the antiserum is determined by immunoelectrophoresis (IEP) prior to conjugation. By IEP, the antiserum reacts specifically with 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 against anti-rabbit IgG and anti-rabbit whole serum results in single arcs of precipitation.

Reagent

Supplied as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 1 mM MgCl₂, 50% glycerol, and 15 mM sodium azide as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C.

Product Profile

Dot Blot: titer 1:30,000

Diluted conjugate detects <20 ng bovine IgG bound to nitrocellulose.

Substrate: 5-Bromo-4-chloro-3-indolyl Phosphate/Nitroblue Tetrazolium (BCIP/NBT), SIGMA FAST™ Tablets, Cat. No. B5655.

Direct ELISA: titer 1:30,000

Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 405 nm after 30 minutes of substrate conversion at 25 °C.² 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: *p*-Nitrophenyl phosphate (pNPP), Cat.No. N2765, 1.0 mg/ml in 10% diethanolamine buffer, pH 9.8, containing 0.5 mM MgCl₂.

Note: Working dilutions should be determined by titration assays. Due to differences in assay systems, these titers may not reflect the user's actual working dilution.

References

1. Avrameas, V., *Immunochemistry*, **6**, 43, (1969).
2. Voller, A., et al., *Bull. World Health Organ.*, **53**, 55 (1976).
3. Pluzek, K., and Ramlau, R., Alkaline Phosphatase Labeled Reagents, In: *CRC Handbook of Immunoblotting of Proteins*, Bjerrum O., and Heegaard, N., eds., p. 177, (CRC Press Inc., Boca Raton, FL, 1988).

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