

Product Information

Monoclonal Anti-Bovine IgG–Alkaline Phosphatase, clone BG-18

produced in mouse, purified immunoglobulin

Catalog Number **A7554**

Product Description

Monoclonal Anti-Bovine IgG (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Purified bovine IgG was used as the immunogen. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The immunoglobulin fraction of the ascites fluid is conjugated to alkaline phosphatase using 0.2% glutaraldehyde.

Monoclonal Anti-Bovine IgG recognizes an epitope existing on both bovine IgG1 and IgG2. The antibody does not react with SDS-denatured and reduced bovine IgG. No cross-reaction is observed with bovine IgM or with IgG derived from the following species: human, goat, sheep, rabbit, pig, dog, chicken, cat, guinea pig, or horse. The antibody may be used in various immunochemical applications including immunoblotting (chemiluminescent), immunohistochemistry (paraffin-embedded sections), direct ELISA, and dot blot.

Conventional antibodies to bovine immunoglobulins suffer from lack of species specificity. In many instances, such antibodies recognize immunoglobulins of other species appearing in the tested preparation, especially when the tested preparation is of human origin. As a result, an extensive absorbing stage must be integrated in the manufacturing process of these reagents. The use of monoclonal antibody to bovine IgG, which is devoid of cross-reactivity to bovine IgM, to human IgG, and other species as specified above, can therefore serve as an essential tool in many applications.

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.

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. Working dilution should be discarded if unused within 12 hours.

Product Profile

Direct ELISA: minimum dilution of 1:25,000 was determined using 5 µg/ml bovine IgG

Dot blot: suitable

Immunohistochemistry: minimum dilution of 1:75 in an indirect assay using formalin-fixed, paraffin-embedded sections of rabbit spleen and bovine anti-rabbit IgG

Immunoblotting (chemiluminescent): minimum working dilution 1:100,000

Note: In order to obtain the best results using different techniques and preparations, we recommend determining the optimal working dilutions by titration.

Reference

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

DS,KAA,PHC 10/14-1