

Product Information

Monoclonal Anti-Bovine IgG

Biotin Conjugate

Clone BG-18

Immunoglobulin Fraction of Mouse Ascites Fluid

Product No. **B 9780**

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 assay using immunoglobulin specific antisera. The immunoglobulin fraction of the ascites fluid containing anti-bovine IgG is conjugated to biotin amidocaproate N-hydroxysuccinimide ester. This covalent coupling of biotin to the immunoglobulin allows for the binding of avidin, ExtrAvidin® or streptavidin bearing a variety of different labels.

Monoclonal Anti-Bovine IgG recognizes an epitope existing in both bovine IgG1 and IgG2. No cross-reaction is observed with bovine IgM or with IgG from the following species: cat, chicken, dog, goat, guinea pig, horse, human, pig, sheep, or rabbit.

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

Reagents

The product is supplied as a solution in 0.01M phosphate buffered saline, pH 7.4, containing 1% BSA and 15 mM sodium azide.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the

attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Product Profile

1. Direct ELISA: Minimum 1:50,000
Titer is determined in ELISA using 1 µg/ml freshly prepared bovine IgG for coating of microtiter plates, and ExtrAvidin-Peroxidase (Product No. E 2886).
2. Direct Dot Blot: Minimum 1:60,000
Titer was determined in a direct assay using 40 ng/dot of freshly prepared bovine IgG and 2 µg/ml ExtrAvidin-Peroxidase.
3. Indirect Dot Blot: Minimum 1:120,000
Titer was determined in an indirect assay using 20 ng/dot of freshly prepared rabbit IgG, Bovine Anti-Rabbit IgG as the primary antibody and 2 µg/ml ExtrAvidin-Peroxidase.
4. Immunohistology: Minimum 1:300
Titer was determined in an indirect assay using formalin-fixed, paraffin-embedded sections of rabbit spleen with Bovine-Anti-Rabbit IgG as primary antibody and ExtrAvidin Peroxidase at 25 µg/ml.

In order to obtain best results in different techniques and preparations, we recommend to determine optimal working dilutions by titration test.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.