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Product Information

MONOCLONAL ANTI-HAMSTER IMMUNOGLOBULINS (IgG & IgM) CLONE HG-31 Mouse Ascites Fluid

Product Number **H 4772**

Product Description

Monoclonal Anti-Hamster Immunoglobulins (mouse IgG2a isotype) is derived from the HG-31 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with purified hamster IgG. The isotype is determined using Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

Monoclonal Anti-Hamster Immunoglobulins recognize an epitope located on the heavy chain of hamster IgG. In an immunoblot of denatured non-reduced hamster serum, the product stains bands of the intact hamster immunoglobulin molecules corresponding to molecular weights of 150-200 kDa and 900 kDa (IgG and IgM, respectively). Using competitive ELISA, no cross reaction is observed with human serum or with IgG of the following species: human, guinea pig, rat, bovine, rabbit, goat, sheep, horse, dog, chicken, pig or cat. Monoclonal Anti-Hamster Immunoglobulins may be used for the localization of hamster immunoglobulins using various immunochemical assays such as ELISA, immunoblot, dot blot and immunocytochemistry.

Primary antibodies developed in hamster are widely used in various assay techniques by both researchers and clinicians worldwide. Secondary antibodies may suffer from the lack of species specificity for the primary hamster immunoglobulin. In many instances such antibodies will also recognize non-related immunoglobulins that appear in the preparation being tested, thus resulting in increased levels of background staining and false positives. This obstacle is most often observed when the test preparation is of human origin. To resolve this extensive adsorbing steps must be incorporated in the manufacturing process of these reagents. Because Monoclonal Anti-Hamster Immunoglobulins is devoid of any binding capacity to human and many other species, it can serve as an essential tool in many applications, especially when used as a secondary reagent in immunohistochemistry.^{1,2}

Reagents

The product is provided as ascites fluid with 0.1% sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Store at 2-8 °C for up to one month.

For extended storage freeze 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.

Product Profile

The minimum antibody titer of 1:10,000 was determined by ELISA using 1 µg/ml of freshly prepared hamster IgG for coating.

Note: Second antibody against mouse immunoglobulins may cross-react with the hamster IgG when coated on the microtiter plate at higher concentrations.

In order to obtain best results in different techniques and preparations, it is recommended that each individual user determine their optimum working dilution by titration assay.

References

1. Carson, S., et al., J. Biol. Chem. **258**, 9510 (1983).
2. MacMillan, F., et al., J. Histochem. Cytochem. **32**, 76 (1984).

JWM/DAA 4/2003

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