



Product Information

MONOCLONAL ANTI- β -2-MICROGLOBULIN CLONE BM-63

Mouse Ascites Fluid

Product Number **M 7398**

Product Description

Monoclonal anti- β -2-Microglobulin (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Mice were immunized with purified human β -2-Microglobulin and a lysate of a lymphoblastoid cell line. Antibody producing clones were selected according to the following criteria:

1) positive immunofluorescent labeling of normal human peripheral blood lymphocytes (PBL's), 2) negative reaction with Daudi cells, and 3) positive reaction with purified human β -2-microglobulin in a direct ELISA. The isotype is determined by a double diffusion assay using immunoglobulin and subclass specific antisera.

Monoclonal anti- β -2-Microglobulin is immunospecific for β -2-microglobulin as determined by indirect immunofluorescent labeling and ELISA. No cross reactivity is observed with lymphoid cells from sheep, donkey, rabbit, guinea pig, or calf when tested by indirect immunofluorescent methods.

β -2-Microglobulin is an 11,800 dalton, 99 residue, single chain polypeptide. It is the light chain of class I antigens of the major histocompatibility complex (MHC). It appears on the membrane of all mammalian nucleated cells and is also present, at low levels, in human serum, urine and other body fluids. β -2-Microglobulin may be elevated in the serum or urine of patients with SLE, rheumatoid arthritis, metal toxications, some viral infections and possibly malignant disorders and AIDS. The molecule contains highly conserved sequences and serological cross reactivity between β -2-microglobulin of different species has been reported. Homologies of β -2-microglobulin to the heavy chain of class I MHC antigens, to immunoglobulins and to Thy-1 have also been demonstrated.

Antibodies to β -2-Microglobulin are easily incorporated into RIA, ELISA and EIA procedures. Monoclonal anti- β -2-Microglobulin may be used to quantitative determination of human β -2-microglobulin in human serum, plasma, urine or other body fluids. It can be used to monitor the course of tubular proteinuria and tumors of the lymphatic system.

Reagents

The product is provided as ascites fluid with 15 mM sodium azide as a preservative.

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.

Storage/Stability

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 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

1. A minimum working dilution of 1:1,000 is determined by indirect ELISA using purified β -2-microglobulin at 1 μ g/ml to coat.
2. A minimum working dilution of 1:500 is determined by indirect immunofluorescent labeling of human PBL's.

In order to obtain best results it is recommended that each individual user determine their optimum working dilution by titration assay.

JWM/DAA 8/02

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.