Source

Monoclonal Anti-B2M Antibody, Mouse IgG2b (BBM.1) is a mouse monoclonal antibody recombinantly expressed from human 293 cells (HEK293), which provides higher batch consistency and long term security of supply.

Application

ELISA (Evaluation of levels of B2M protein).
Flow Cytometry (Evaluation of an epitope within the extracellular domain of human B2M protein).

Clone

BBM.1

Species

Mouse

Isotype

Mouse IgG2b | Mouse kappa

Specificity

Clone BBM.1 detects Beta-2-microglobulin in human.

Reactivity

Human

Immunogen

MOLT-4, a Human acute lymphoblastic leukemia cell line.

Conjugate

Unconjugated

Isotype Control

The Isotype control is sold separately and you can search for Cat. No. ***DNP-M486*** for product information.

Recommended Dilution

1:50

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

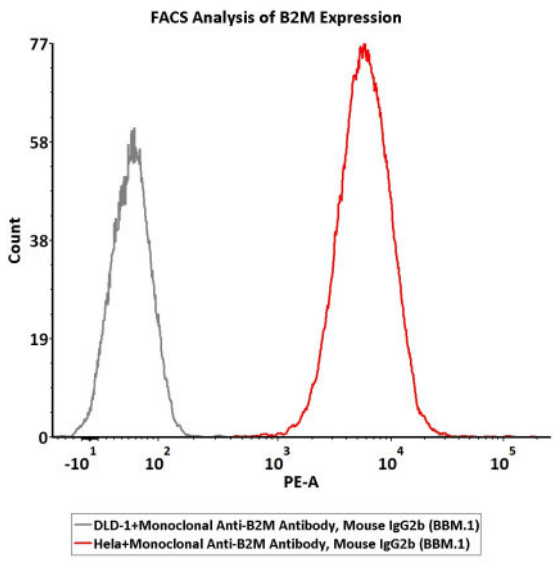
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 12 months after reconstitution.
- 2-8 °C for 12 months after reconstitution.

Bioactivity-FACS



Flow cytometric analysis of Hela cells staining with Monoclonal Anti-B2M Antibody, Mouse IgG2b (BBM.1) (Cat. No. B2M-M614c) at 1:50 dilution (2 µL of the stock solution corresponds to labeling of 1e6 cells in a final volume of 100 µL), compared with negative control cells, washed and then followed by PE anti-mouse IgG2b Antibody and analyzed with FACS. PE signal was used to evaluate the binding activity (QC tested).

Background

Beta-2-microglobulin (B2M) is a component of the class I major histocompatibility complex (MHC) and involved in the presentation of peptide antigens to the immune system. B2M consists of two β sheets joined by a disulfide bond, which could form amyloid fibrils in some pathological conditions. Increasing evidence has indicated that B2M gene alterations in tumor cells may lower the efficacy of T-cell based immunotherapies by hampering MHC class I-mediated tumor antigen presentation and avoiding T cell recognition.

Clinical and Translational Updates