

# Monoclonal anti-human B2M antibody (clone AT101F10)

Mouse IgG<sub>2b</sub>, κ

# Cat. No. IBATGA0439

Immunogen: Recombinant human B2M (21-119aa) purified from E. coli

NCBI Accession No.: NP\_004039

Isotype: Mouse  $IgG_{2b}$  heavy chain and  $\kappa$  light chain

**Clone:** Anti-human B2M mAb, clone AT101F10, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human B2M protein.

**Description:** Beta2 microglobulin, also known as B2M, is a component of MHC class I molecules, Involved in the presentation of peptide antigens to the immune system. B2M is a protein found on the surface of many cells and plentiful on the surface of white blood cells. Increased production or destruction of these cells causes B2M levels in the blood to increase. This increase is seen in people with cancers involving white blood cells, but it is particularly meaningful in people newly diagnosed with multiple myeloma. Multiple myeloma is a malignancy (cancer) of a certain kind of white blood cell, called a plasma cell. B2M Testing is done primarily when evaluating a person for certain kinds of cancer affecting white blood cells including chronic lymphocytic leukemia, non-Hodgkin's lymphoma, and multiple myeloma or kidney disease.

Concentration: 1 mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

**Storage:** Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

**Usage:** The antibody has been tested by ELISA, Western blot analysis. Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Application: ELISA, WB, Flow cytometry, ICC/IF

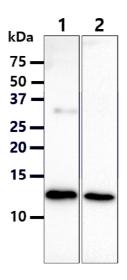




#### Western blot analysis

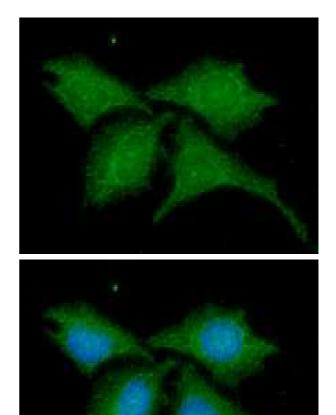
The lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human B2M antibody (1:1000). Proteins were visualized using a goat antimouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1 : HeLa cell lysate Lane 2 : U937 cell lysate



#### **ICC/IF** analysis

ICC/IF analysis of B2M in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human B2M antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



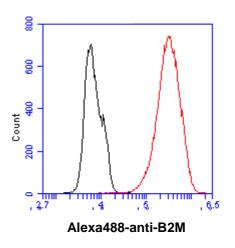
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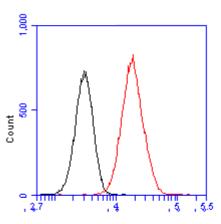




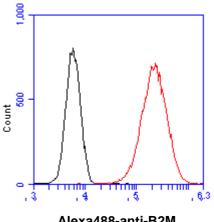
## Flow cytometry

Flow cytometry analysis of B2M in A431 cell line, staining at 2-5ug for 1x10<sup>6</sup>cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).





Alexa488-anti-B2M



Alexa488-anti-B2M

General references: Huang WC., et al (2010) J Biol Chem. 285(11): 7947-56. Morabito A., et al. (2009) Hum Immunol. 70(7): 492-5.

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### Flow cytometry

Flow cytometry

Flow cytometry analysis of B2M in 293T cell line, staining at 2-5ug for 1x10<sup>6</sup> cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

Flow cytometry analysis of B2M in HeLa cell line, staining at 2-5ug for 1x10<sup>6</sup>cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype

control antibody was mouse IgG (black line).