

# Human beta 2-Microglobulin/B2M antibody

Catalog Number: ATGA0439

## PRODUCT INFORMATION

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**Catalog number**

ATGA0439

**Clone No.**

AT101F10

**Product type**

Monoclonal Antibody

**UnitProt No.**

P61769

**NCBI Accession No.**

NP\_004039

**Alternative Names**

Beta-2-microglobulin, CDABP0092, HDCMA22P

## PRODUCT SPECIFICATION

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**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

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

**Isotype**

IgG2b kappa

**Purification Note**

By protein-A affinity chromatography

**Application**

ELISA, WB, ICC/IF, FACS

**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.

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## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### 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.

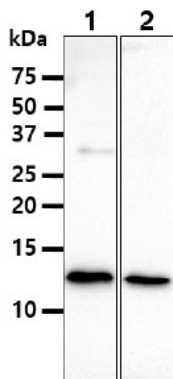
### General References

Huang WC., et al (2010) J Biol Chem. 285(11): 7947-56.

Morabito A., et al. (2009) Hum Immunol. 70(7): 492-5.

## DATA

### Western blot analysis (WB)

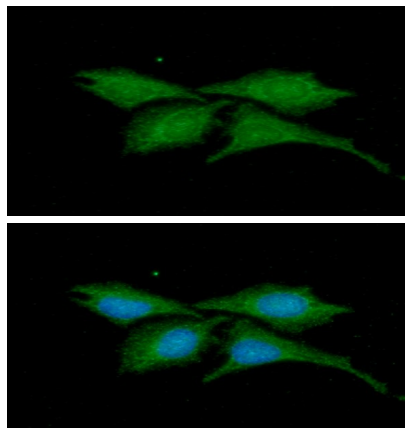


The lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human B2M antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1 : HeLa cell lysate

Lane 2 : U937 cell lysate

### Immunocytochemistry/Immunofluorescence (ICC/IF)

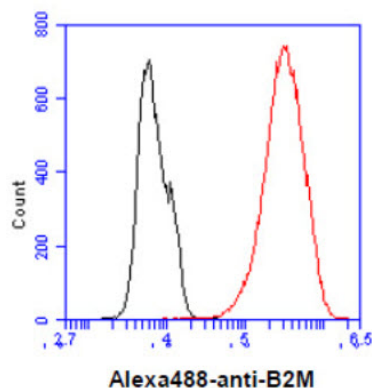


ICC/IF analysis of B2M in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human B2M antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

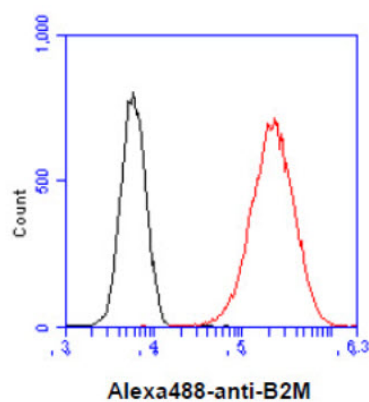
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## Flow cytometry (FACS)



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).



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).