Human beta 2-Microglobulin/B2M antibody

Catalog Number: ATGA0439

PRODUCT INFORMATION

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

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.

Human beta 2-Microglobulin/B2M antibody

Catalog Number: ATGA0439

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

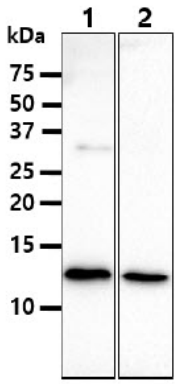
Beta2 microglobulin, also known as B2M, is a component of MHC class I molecules, Involved in the presentation of peptide antigens to the immune system. B2M is a protein found on the surface of many cells and plentiful on the surface of white blood cells. Increased production or destruction of these cells 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.

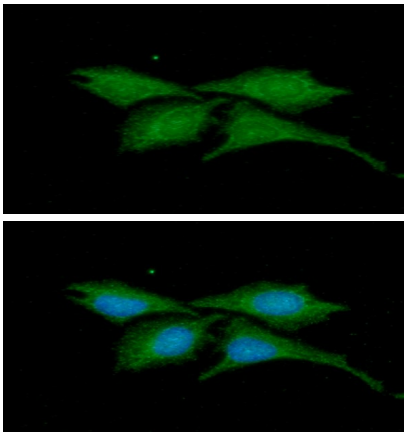
DATA

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)

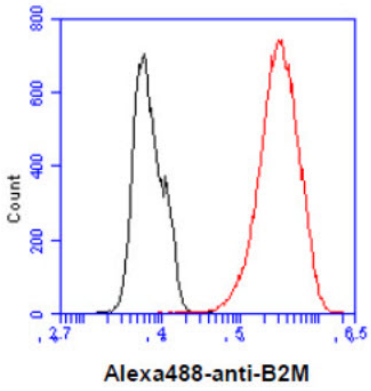


ICC/IF analysis of B2M in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human B2M antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

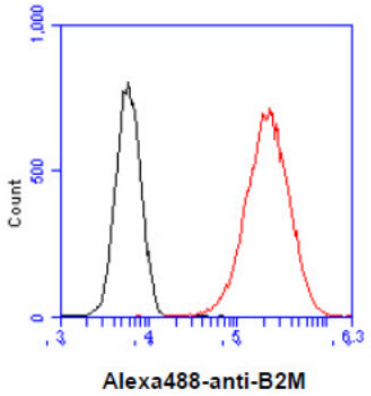
Human beta 2-Microglobulin/B2M antibody

Catalog Number: ATGA0439

Flow cytometry (FACS)



Flow cytometry analysis of B2M in A431 cell line, staining at 2-5ug for 1x106cells (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 1x106cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).