

Anti-B2M/beta 2-Microglobulin Antibody (8W936)

Product Details

Ig Type:	Mouse IgG1
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	8W936
Purification:	Protein A

Applications

Verified Activity:	<p>1. Immunofluorescence staining of Human B2M in Hela cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with mouse anti-Human B2M monoclonal antibody (1:60) at 37°C 1 hour. Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.</p> <p>2. Flow cytometric analysis of Human β2M, expression on human whole blood Lymphocytes. Cells were stained with purified anti-Human β2M, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes.</p>
Application:	FCM, ICC/IF
Recommended	ICC-IF: 1:20-1:100; FCM: 1:25-1:100

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human B2M / beta-2 microglobulin Protein (TMPY-01686)
Antigen Species:	Human
Synonyms:	beta-2 microglobulin; β -2 microglobulin

Research Background

B2M, also known as β 2-Microglobulin or CDABP0092, is a component of MHC class I molecules found expression in all nucleated cells (excludes red blood cells). The major function of MHC class I molecules is to display fragments of proteins from within the cell to T-cells and cells containing foreign proteins will be attacked. B2M (β 2-Microglobulin) is a low molecular weight protein. It was demonstrated that B2M (β 2-Microglobulin) was localized in the membranes of nucleated cells and was found to be associated with HL-A antigens. B2M (β 2-Microglobulin) is present in free form in various body fluids and as a subunit of histocompatibility antigens on cell surfaces lateral to the α 3 chain. Unlike α 3, β 2 has no transmembrane region. Directly above β 2 lies the α 1 chain, which itself is lateral to the α 2. In the absence of B2M (β 2 microglobulin), very limited amounts of MHC class I (classical and non-classical) molecules can be detected on the surface. In the absence of MHC class I, CD8 T cells, a subset of T cells involved in the development of acquired immunity cannot develop. Low levels of B2M (β 2 microglobulin) can indicate non-

progression of HIV.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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