Data Sheet (Cat.No.TMAY-02181)

Anti-B2M/beta 2-Microglobulin Antibody (2F545)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	2F545
Purification:	Protein A

Applications

Verified Activity:	1. Anti-B2M rabbit monoclonal antibody at 1:500 dilution. -Lane A: Hela Whole Cell lysate. -Lysates/proteins at 30 µg per lane. -Secondary -Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution. -Developed using the Odyssey technique. -Performed under reducing conditions. -Predicted band size:14 kDa. -Observed band size:14 kDa. 2. B2M was immunoprecipitated using: -Lane A:0.5 mg HL-60 Whole Cell Lysate. -Lane B:0.5 mg A431 Whole Cell Lysate. -Lane C:0.5 mg Hela Whole Cell Lysate. -Lane D:0.5 mg Raji Whole Cell Lysate -0.5 µL anti-B2M rabbit monoclonal antibody and 15 µl of 50 % Protein G agarose. -Primary antibody: -Anti-B2M rabbit monoclonal antibody, at 1:500 dilution. -Secondary antibody: -Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution. -Developed using the odyssey technique. -Performed under reducing conditions. -Predicted band size: 14 kDa. -Observed band size: 14 kDa
Application:	IP,WB
Recommended	WB: 1:500-1:1000; IP: 0.2-1 µL/mg of lysate

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 β2-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 moleculesis is to display fragments of proteins from within the cell to T-cells and cells containing foreign proteins will be attacked. B2M (β2-Microglobulin) is a low molecular weight protein. It was demonstrated that B2M (β2-Microglobulin) was localized in the membranes of nucleated cells and was found to be associated with HL-A antigens. B2M (β2- Microglobulin) is present in free form in various body fluids and as a subunit of histocompatibility antigens on cell surfaces lateral to the α3 chain. Unlike α3, β2 has no transmembrane region. Directly above β2 lies the α1 chain, which itself is lateral to the α2. In the absence of B2M (β2 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 (β2 microglobulin) can indicate non-progression of HIV.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481