

11-237-C100

## Monoclonal Antibody to beta2-microglobulin Purified Antibody (0.1 mg)

<b>Clone:</b>	B2M-01
<b>Isotype:</b>	Mouse IgG2a
<b>Specificity:</b>	The antibody B2M-01 reacts with beta2-microglobulin (beta2M) associated with cell-surface MHC Class I molecules and other membrane antigens as well as with soluble beta2-microglobulin. Beta2M is a 12 kDa Ig like glycoprotein expressed on lymphocytes, thymocytes, monocytes, granulocytes, platelets, endothelial cells and epithelial cells. It is absent on erythrocytes.
<b>Immunogen:</b>	Purified human beta2-microglobulin
<b>Species Reactivity:</b>	Human
<b>Negative Species:</b>	Mouse, Bovine, Canine (Dog), Rabbit, Chicken
<b>Application:</b>	<b>Flow Cytometry</b> <i>Recommended dilution:</i> 1 µg/ml <i>Positive control:</i> Peripheral blood lymphocytes <i>Negative control:</i> DAUDI human Burkitt lymphoma cell line, erythrocytes <b>Immunoprecipitation</b> <i>Application note:</i> The B2M-01 coprecipitates beta2-microglobulin (12 kDa) and HLA antigens (45 kDa) from the lysates of human lymphoid cells. <b>Western Blotting</b> <i>Recommended dilution:</i> 2-4 µg/ml <i>Positive control:</i> U937 human histiocytic lymphoma cell line RAJI human Burkitt lymphoma cell line <i>Negative control:</i> EL4 mouse lymphoblastic lymphoma cell line <i>Sample preparation:</i> Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing/reducing Laemmli SDS-PAGE sample buffer. <i>Application note:</i> Both reducing and non-reducing conditions. <b>Immunohistochemistry (paraffin sections)</b> <i>Recommended dilution:</i> 10 µg/ml <i>Positive tissue:</i> kidney glomeruli <b>ELISA</b> <i>Application note:</i> Working dilution should be determined by investigator. <b>RIA</b> <i>Application note:</i> Use at an assay dependent concentration. The dissociation constant of the antibody soluble beta2-microglobulin is $1.5 \times 10^{-8}$ mol/l as determined by competitive RIA.
<b>Purity:</b>	> 95% (by SDS-PAGE)
<b>Purification:</b>	Purified from ascites by precipitation methods and ion exchange chromatography.
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.
<b>Expiration:</b>	See vial label

**For laboratory research only, not for drug, diagnostic or other use.**



**Antibodies**

**Lot Number:** See vial label

**Background:** **Beta2-microglobulin** non-covalently associates with the 44 kDa alpha chain to form the HLA Class I antigen complex. Human beta2-microglobulin associated with HLA Class I antigens is expressed on many types of cells including lymphocytes, thymocytes, monocytes, granulocytes, platelets, endothelial cells, and epithelial cells. It is absent on erythrocytes.

**References:**

- \*Hilgert I, Horejsi V, Kristofova H.: The use of murine monoclonal antibody B2M-01 for detection and purification of human beta 2-microglobulin. *Folia Biol (Praha)*. 1984;30(6):369-76.
- \*Khurana M, Traum AZ, Aivado M, Wells MP, Guerrero M, Grall F, Libermann TA, Schachter AD.: Urine proteomic profiling of pediatric nephrotic syndrome. *Pediatr Nephrol*. 2006 Sep;21(9):1257-65. Epub 2006 Jun 30.

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