Monoclonal Antibody to beta2-Microglobulin
Purified Antibody (0.1 mg)

Clone: B2M-01
Isotype: Mouse IgG2a
Specificity: 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.

Regulatory Status: RUO
Immunogen: Purified human beta2-microglobulin
Species Reactivity: Human
Negative Species: Mouse, Bovine, Canine (Dog), Rabbit, Chicken
Application:
- Flow Cytometry
  Recommended dilution: 1 µg/ml
  Positive control: Peripheral blood lymphocytes
  Negative control: DAUDI human Burkitt lymphoma cell line, erythrocytes
- Immunoprecipitation
  Application note: The B2M-01 coprecipitates beta2-microglobulin (12 kDa) and HLA antigens (45 kDa) from the lysates of human lymphoid cells.
- Western Blotting
  Recommended dilution: 2-4 µg/ml
  Positive control: U937 human histiocytic lymphoma cell line
  RAJI human Burkitt lymphoma cell line
  Negative control: EL4 mouse lymphoblastic lymphoma cell line
  Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% lauryl maltoside 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.
  Application note: Both reducing and non-reducing conditions.
- Immunohistochemistry (paraffin sections)
  Recommended dilution: 10 µg/ml
  Positive tissue: kidney glomeruli
- Immunocytochemistry
- ELISA
  Application note: Working dilution should be determined by investigator.
- RIA
  Application note: Use at an assay dependent concentration. The dissociation constant of the antibody soluble beta2-microglobulin is 1.5 x 10^-8 mol/l as determined by competitive RIA.

Purity: > 95% (by SDS-PAGE)
Purification: Purified by precipitation methods
Concentration: 1 mg/ml
Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.

Expiry: See vial label

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:

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