ARG62678
anti-beta 2 Microglobulin antibody [B2M-01]

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [B2M-01] recognizes beta 2 Microglobulin
Tested Reactivity	Hu
Species Does Not React With	Ms, Bov, Chk, Dog, Rb
Tested Application	ELISA, FACS, ICC/IF, IHC-P, IP, RIA, WB
Specificity	The clone 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.
Host	Mouse
Clonality	Monoclonal
Clone	B2M-01
Isotype	IgG2a
Target Name	beta 2 Microglobulin
Species	Human
Immunogen	Purified human beta2-microglobulin
Conjugation	Un-conjugated
Alternate Names	Beta-2-microglobulin

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
FACS	1 µg/ml
ICC/IF	Assay-dependent
IHC-P	10 µg/ml
IP	Assay-dependent
RIA	Assay-dependent
WB	2 - 4 µg/ml

Application Note

IP: The B2M-01 coprecipitates beta2-microglobulin (12 kDa) and HLA antigens (45 kDa) from the lysates of human lymphoid cells.
WB: Sample preparation: 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. Application note: Both reducing and non-reducing condition.
RIA: The dissociation constant of the antibody soluble beta2-microglobulin is 1.5 x 10-8 mol/l as determined by competitive RIA.

	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	FACS: Positive control: Peripheral blood lymphocytes. Negative control: Daudi and erythrocytes. WB: Positive control: U937 and Raji. Negative control: EL4 mouse lymphoblastic lymphoma cell line. IHC-P: Positive tissue: Kidney glomeruli.

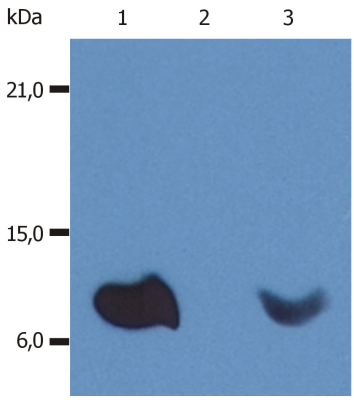
Properties

Form	Liquid
Purification	Purified by sequential precipitation methods with caprylic acid and ammonium sulphate.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

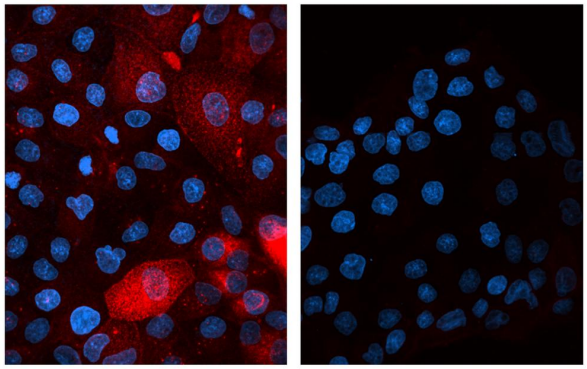
Database links	GeneID: 567 Human Swiss-port # P61769 Human
Gene Symbol	B2M
Gene Full Name	beta-2-microglobulin
Background	Beta2-microglobulin non-covalently associates with the 44 kDa alpha chain to forms the HLA Class I antigen complex. Human beta2-microglobulin associated with HLA Class I antigens is expressed on many types of cells including lymphocytes, thymocytes, monocytes, granulocytes, platelets, endothelial cells, and epithelial cells. It is absent on erythrocytes.
Function	Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody
Calculated Mw	14 kDa
PTM	Glycation of Ile-21 is observed in long-term hemodialysis patients.

Images



ARG62678 anti-beta 2 Microglobulin antibody [B2M-01] WB image

Western blot: 1. Raji cell lysate, 2. EL4 cell lysate, 3. U937 cell lysate stained with ARG62678 anti-beta 2 Microglobulin antibody [B2M-01].



ARG62678 anti-beta 2 Microglobulin antibody [B2M-01] ICC/IF image

Immunofluorescence: β2-microglobulin-transfected canine cells stained with ARG62678 anti-beta 2 Microglobulin antibody [B2M-01] (red) at 2 µg/ml dilution.
Cells were fixed with 4% PFA and permeabilized with 0.1% PBS-Tween20 containing 2% BSA.