

# Datasheet for ABIN192163

# anti-beta-2 Microglobulin antibody (PE)





**Publications** 



Go to Product page

$\sim$				
( )	ve.	r\/	101	Λ

Quantity:	0.1 mg
Target:	beta-2 Microglobulin (B2M)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This beta-2 Microglobulin antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

## **Product Details**

Product Details		
Immunogen:	Purified human beta2-microglobulin	
Clone:	B2M-01	
Isotype:	lgG2a	
Specificity:	The mouse monoclonal antibody B2M-01 reacts with beta2-microglobulin (beta2M, extracellular antigen), associated with cell-surface MHC Class I molecules and other membrane antigens, as well as it reacts 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.	
No Cross-Reactivity:	Chicken, Cow, Dog, Mouse, Rabbit	
Cross-Reactivity (Details):	Human	
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions.  Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.	

# **Target Details**

9		
Target:	beta-2 Microglobulin (B2M)	
Alternative Name:	beta2-Microglobulin (B2M Products)	
Background:	Beta-2-microglobulin,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.,B2M	
Gene ID:	567	
UniProt:	P61769	
Pathways:	TCR Signaling, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process	
Application Details		
Application Notes:	Flow cytometry: Recommended dilution: 1-2 µg/mL, positive control: peripheral blood lymphocytes, negative control: DAUDI human Burkitt lymphoma cell line, erythrocytes.	
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.	
Restrictions:	For Research Use only	
Handling		
Concentration:	0.1 mg/mL	
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide	
Preservative:	Sodium azide	
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.	
Handling Advice:	Do not freeze.  Avoid prolonged exposure to light.	
Storage:	4 °C	
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.	

Product cited in:

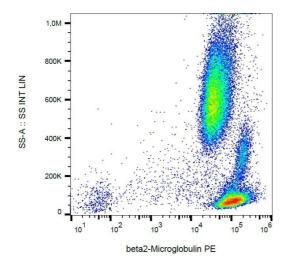
Poláková, Železníková, Russ: "HLA-G5 in the blood of leukemia patients and healthy individuals." in: **Leukemia research**, Vol. 37, Issue 2, pp. 139-45, (2013) (PubMed).

Khurana, Traum, Aivado, Wells, Guerrero, Grall, Libermann, Schachter: "Urine proteomic profiling of pediatric nephrotic syndrome." in: **Pediatric nephrology (Berlin, Germany)**, Vol. 21, Issue 9, pp. 1257-65, (2006) (PubMed).

Lafon, Prehaud, Megret, Lafage, Mouillot, Roa, Moreau, Rouas-Freiss, Carosella: "Modulation of HLA-G expression in human neural cells after neurotropic viral infections." in: **Journal of virology**, Vol. 79, Issue 24, pp. 15226-37, (2005) (PubMed).

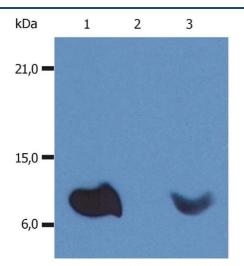
Hilgert, Horejsí, Kristofová: "The use of murine monoclonal antibody B2M-01 for detection and purification of human beta 2-microglobulin." in: **Folia biologica**, Vol. 30, Issue 6, pp. 369-76, (1985) (PubMed).

#### **Images**



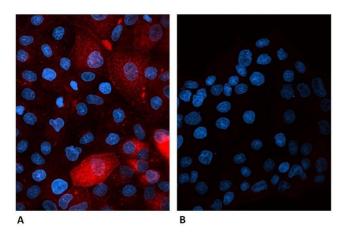
#### **Flow Cytometry**

**Image 1.** Flow cytometry analysis (surface staining) of  $\beta$ 2-microglobulin in human peripheral blood with anti- $\beta$ 2-microglobulin (B2M-01) PE.



## **Western Blotting**

**Image 2.** Western Blotting Western Blotting analysis (non-reducing conditions) of whole cell lysate of various cell lines using anti-human  $\beta$ 2-microglobulin (B2M-01). Lane 1: RAJI human Burkitt lymphoma cell line Lane 2: EL4 mouse lymphoblastic lymphoma cell line Lane 3: U937 human histiocytic lymphoma cell line



#### **Immunofluorescence**

Image 3. Confocal microscopy of human  $\beta$ 2-microglobulin-transfected canine cells labeled A) with B2M-01 antibody Alexa Fluor® 647 conjugate and B) with Alexa Fluor® 647 conjugated Mouse IgG2a Isotype Control (A6-458-C100). Cells were fixed with 4% PFA and permeabilized with 0.1% PBS-Tween20 containing 2% BSA. Antibody concentration  $2\mu$ g/ml.