

Datasheet for ABIN93906  
**anti-beta-2 Microglobulin antibody (HRP)**



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## Overview

Quantity:	0.1 mg
Target:	beta-2 Microglobulin (B2M)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This beta-2 Microglobulin antibody is conjugated to HRP
Application:	Western Blotting (WB), ELISA

## Product Details

Immunogen:	Purified human beta2-microglobulin
Clone:	B2M-01
Isotype:	IgG2a
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 activated horseradish peroxidase (HRP) of high specific enzyme activity under optimum conditions and unconjugated antibody and free HRP are

## Product Details

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removed by size-exclusion chromatography.

## Target Details

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Target:	beta-2 Microglobulin (B2M)
Alternative Name:	beta2-Microglobulin ( <a href="#">B2M Products</a> )
Background:	Beta-2-microglobulin, 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., B2M
Gene ID:	567
UniProt:	<a href="#">P61769</a>
Pathways:	<a href="#">TCR Signaling</a> , <a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a>

## Application Details

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Application Notes:	Western blotting: Recommended dilution: 1 µg/mL, positive control: peripheral blood lymphocytes, negative control: DAUDI human Burkitt lymphoma cell line, erythrocytes.
Comment:	The purified antibody is conjugated with horseradish peroxidase (HRP) of high specific activity and RZ=3.
Restrictions:	For Research Use only

## Handling

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Concentration:	1 mg/mL
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 0.01 % thimerosal
Preservative:	Thimerosal (Merthiolate)
Precaution of Use:	This product contains Thimerosal (Merthiolate): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	<b>Do not freeze.</b> Avoid prolonged exposure to light.

## Handling

Storage: 4 °C

Storage Comment: Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

## Publications

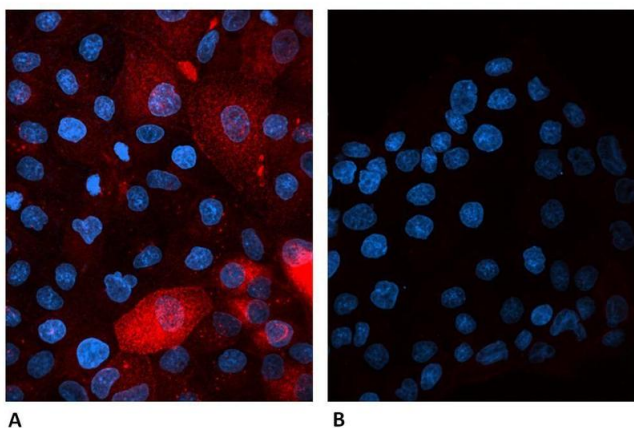
Product cited in: Poláková, Železníková, Russ: "HLA-G5 in the blood of leukemia patients and healthy individuals." in: **Leukemia research**, Vol. 37, Issue 2, pp. 139-45, (2013) ([PubMed](#)).

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](#)).

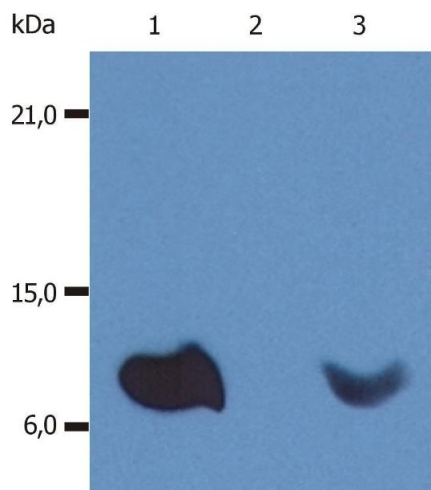
Hilgert, Horejsí, Kristofová: "The use of murine monoclonal antibody B2M-01 for detection and purification of human beta 2-microglobulin." in: **Folia biologica**, Vol. 30, Issue 6, pp. 369-76, (1985) ([PubMed](#)).

## Images



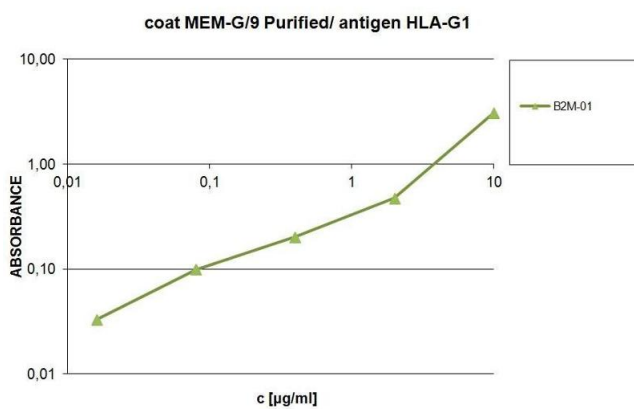
### Immunofluorescence

**Image 1.** 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.



### 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



### ELISA

**Image 3.** ELISA analysis of HLA-G and  $\beta$ 2-microglobulin in supernatant of HLA-G transfectants with anti- $\beta$ 2-microglobulin (B2M-01) HRP as the detection antibody.