

PRODUCT INFORMATION



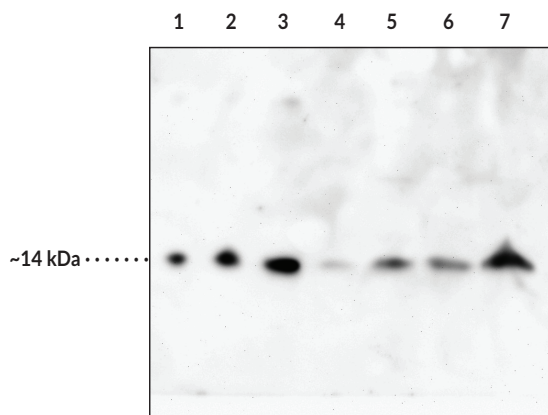
β2-Microglobulin Polyclonal Antibody

Item No. 26130

Overview and Properties

Contents:	This vial contains 500 μg of protein A-purified antibody.
Synonyms:	B2M, β2-Microglycoprotein
Immunogen:	Human β2-microglobulin protein
Species Reactivity:	(+) Human and mouse
Uniprot No.:	P61769
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	ELISA and Western blot (WB); the recommended starting dilution is 1:1,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: β2-Microglobulin Protein (5 ng)
Lane 2: β2-Microglobulin Protein (10 ng)
Lane 3: β2-Microglobulin Protein (20 ng)
Lane 4: HeLa Cell Lysate (50 μg)
Lane 5: Raji Cell Lysate (50 μg)
Lane 6: Jurkat Cell Lysate (50 μg)
Lane 7: A431 Cell Lysate (50 μg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

β 2-Microglobulin is a 99-amino acid protein and the light chain component of major histocompatibility complex (MHC) class I molecules.¹ It is non-covalently associated with the MHC class I α chain and comprises a protein-building subunit of the MHC class I molecule to facilitate complex transport to the cell surface and antigen presentation to cytotoxic T cells. β 2-Microglobulin is found in cells, as well as in extracellular fluids, including urine and serum, and MHC class I-associated β 2-microglobulin exhibits dissociation and equilibrium exchange with circulating soluble β 2-microglobulin. Serum levels of β 2-microglobulin are increased in patients with renal failure, systemic amyloidosis, various autoimmune diseases, including multiple sclerosis, chronic infections, and a variety of cancers.¹⁻⁴ It mediates signaling pathways that promote cellular growth, angiogenesis, epithelial-mesenchymal transition (EMT), and bone metastasis and is used as a predictive biomarker of survival in multiple myeloma and colorectal cancers.¹ Cayman's β 2-Microglobulin Polyclonal Antibody can be used for Western blot and ELISA applications. This antibody recognizes β 2-microglobulin at ~14 kDa from human samples.

References

1. Nomura, T., Huang, W.-C., Zhau, H.E., *et al.* β 2-Microglobulin-mediated signaling as a target for cancer therapy. *Anticancer Agents Med. Chem.* **14(3)**, 343-352 (2014).
2. Eichner, T. and Radford, S.E. Understanding the complex mechanisms of β 2-microglobulin amyloid assembly. *FEBS J.* **278(20)**, 3868-3883 (2011).
3. Stoppini, M. and Bellotti, V. Systemic amyloidosis: Lessons from β 2-microglobulin. *J. Biol. Chem.* **290(16)**, 9951-9958 (2015).
4. Bagnato, F., Durastanti, V., Finamore, L., *et al.* Beta-2 microglobulin and neopterin as markers of disease activity in multiple sclerosis. *Neurol. Sci.* **24(Suppl 5)**, S301-S304 (2003).

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