

Rabbit B2M Polyclonal Antibody | anti-B2M antibody

B2M Antibody

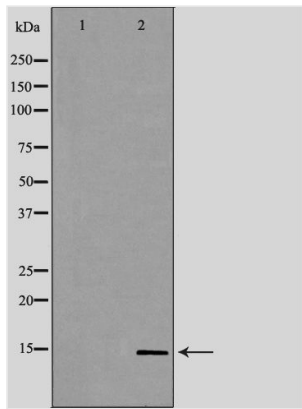
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326226	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

B2M; Polyclonal Antibody; B2M Antibody; B2MG_HUMAN; Beta 2 microglobin; Beta 2 microglobulin; Beta 2 microglobulin precursor; Beta chain of mhc class 1 proteins; Beta chain of MHC class I molecules; Beta-2-microglobulin form pI 5.3; CDABP0092; Hdcma22p; anti-B2M antibody

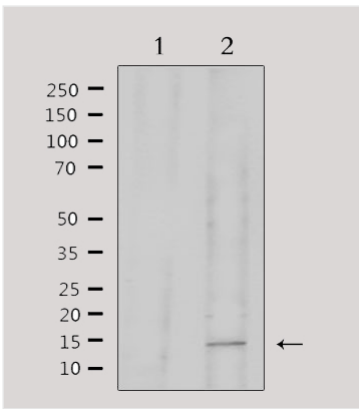
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	B2M antibody detects endogenous levels of total B2M
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	119
Applicable Applications for anti-B2M antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human B2M
Subcellular Location	Secreted. Detected in serum and urine.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



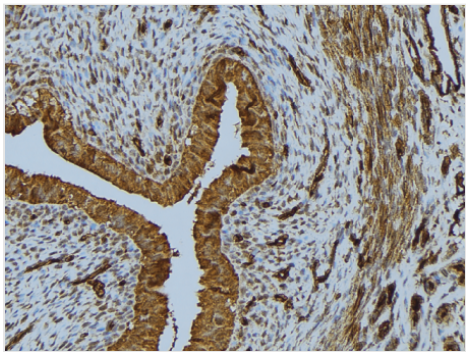
WB (Western Blot)

Western blot analysis of Hela whole cell lysates, using B2M Antibody. The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)

Western blot analysis of extracts from 293, using B2M Antibody. Lane 1 was treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326226 at 1/100 staining Human uterus tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-B2M antibody

Description: Beta2-microglobulin (B2M) is a principal component of the Major Histocompatibility Complex (MHC) class I molecule, a ternary membrane protein complex that displays fragments derived from proteolyzed cytosolic proteins on the surface of cells for recognition by the surveillance immune system (1, 2). As an integral component of the MHC class I complex, beta2-microglobulin plays a critically important role in immune system function (3). It has important relevance to cancer biology research; for example, research studies have shown that nearly one-third of diffuse large B cell lymphomas contain mutations that inactivate beta2-microglobulin gene function, thereby allowing tumor cells to escape immune detection (4). In addition, beta2-microglobulin has been identified as an amyloid preprotein with collagen-binding affinity (5); its accumulation in osteoarthritic lesions of long-term dialysis patients is reportedly a contributing factor to the condition known as amyloid osteoarthropathy (6).

Function: Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system. Exogenously applied M.tuberculosis EsxA or EsxA-EsxB (or EsxA expressed in host) binds B2M and decreases its export to the cell surface (total protein levels do not change), probably leading to defects in class I antigen presentation (PubMed:25356553).

Subunit Structure: Heterodimer of an alpha chain and a beta chain. Beta-2-microglobulin is the beta-chain of major histocompatibility complex class I molecules. Polymers of beta 2-microglobulin can be found in tissues from patients on long-term hemodialysis. B2M alone (not in complex with HLA-I) interacts with M.tuberculosis EsxA (ESAT-6) and an EsxA-EsxB (CFP-10) complex; the tripartite complex can be detected in the host endoplasmic reticulum (PubMed:25356553). The B2M-EsxA complex can be detected in patients with pleural tuberculosis and is stable from pH 4.0 to 8.0 and in the presence of 2M NaCl (PubMed:25356553).

Post-translational Modifications: Glycation of Ile-21 is observed in long-term hemodialysis patients.

Similarity: Belongs to the beta-2-microglobulin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4757826
NCBI GeneID	567
NCBI Accession #	NP_004039.1
NCBI GenBank Nucleotide #	NM_004048.3
UniProt Accession #	P61769; P01884; Q540F8; Q6IAT8; Q9UCK0; Q9UD48; Q9UDF4
Molecular Weight	Observed: 14 kDa Predicted: 14 kDa
NCBI Official Full Name	beta-2-microglobulin
NCBI Official Synonym Full Names	beta-2-microglobulin
NCBI Official Symbol	B2M
NCBI Official Synonym Symbols	IMD43
NCBI Protein Information	beta-2-microglobulin
UniProt Protein Name	Beta-2-microglobulin
UniProt Gene Name	B2M

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/b2m-antibody-immunohistochemistry-western-blot-elisa/326226>