Product Datasheet

Recombinant Beta-2 Microglobulin Antibody (orb2640481)

Catalog Number	orb2640481
Category	Antibodies
Description	Recognizes a protein of 12kDa, identified as beta-2 microglobulin. Major histocompatibility complex (MHC) class 1 molecules bind to antigens for presentation on the surface of cells. The proteasome is responsible for producing these antigens from the components of foreign pathogens. MHC class 1 molecules consist of an alpha heavy chain that contains three subdomains (alpha1, alpha2, alpha3) and a non-covalent associating light chain, known as beta-2-Microglobulin. Beta-2-Microglobulin associates with the alpha3 subdomain of the alpha heavy chain and forms an immunoglobulin domain-like structure that mediates proper folding and expression of MHC class 1 molecules. The alpha1 and alpha2 domains of the alpha heavy chain form the peptide antigen-binding cleft. Mutations in the beta-2-Microglobulin gene can enhance the progression of malignant melanoma phenotypes.
Clonality	Recombinant
Species/Host	Mouse
Isotype	Mouse IgG2b, kappa
Conjugation	Unconjugated
Reactivity	Human
Buffer/Preservatives	1 mg/ml in 1X PBS; rAlbumin free, sodium azide free
Purification	Protein G affinity chromatography
Immunogen	Full length recombinant human protein was used as the immunogen for the recombinant Beta-2 Microglobulin antibody.

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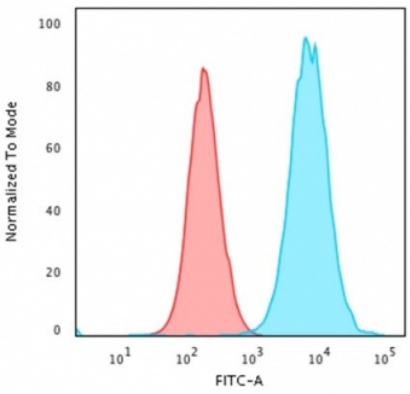
UniProt ID	**P61769**
Tested applications	FACS, IF, IHC-P, WB
Dilution range	Flow cytometry: 1-2ug/million cells,Immunofluorescence: 1-2ug/ml,Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT,Western blot: 1-2ug/ml
Application notes	Optimal dilution of the recombinant Beta-2 Microglobulin antibody should be determined by the researcher.1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.
Antibody Type	Primary Antibody
Clone Number	rB2M/961
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Note	For research use only
Expiration Date	12 months from date of receipt.



Flow cytometry testing of PFA-fixed human HeLa cells with recombinant Beta-2 Microglobulin antibody (clone rB2M/961); Red = isotype control, Blue = recombinant Beta-2 Microglobulin antibody.

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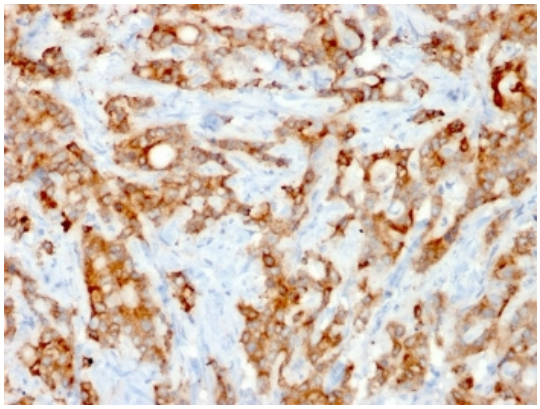
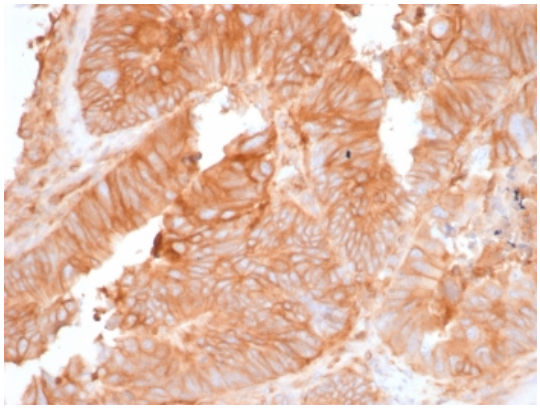
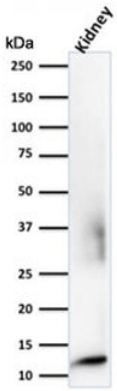


IHC testing of FFPE human lung carcinoma stained with recombinant Beta-2-Microglobulin antibody (rB2M/961). Required HEIR: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE human colon carcinoma stained with recombinant Beta-2-Microglobulin antibody (rB2M/961). Required HEIR: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of human kidney lysate with recombinant Beta-2 Microglobulin antibody (clone rB2M/961). Expected molecular weight: 12-14 kDa.

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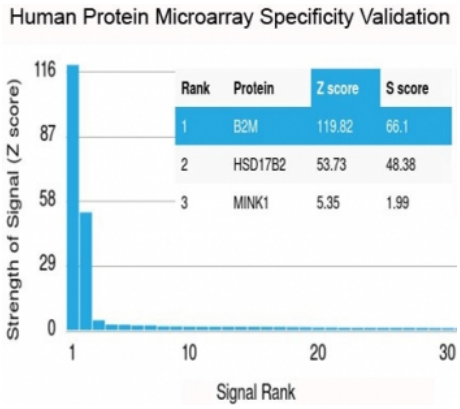
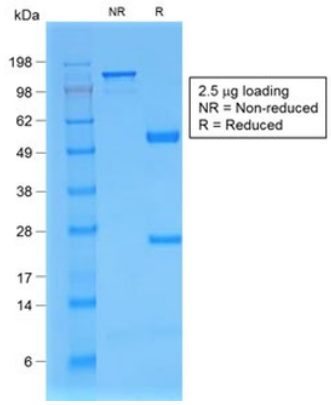
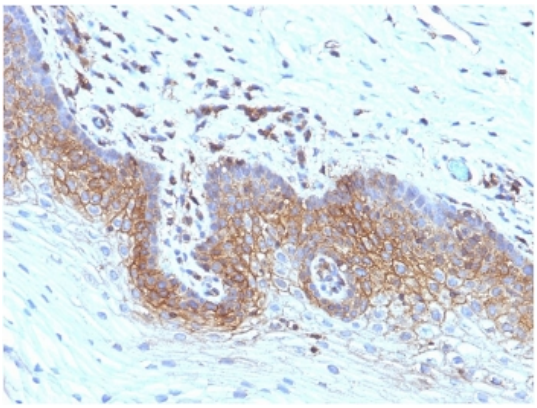


Analysis of HuProt (TM) microarray containing more than 19, 000 full-length human proteins using recombinant Beta-2 Microglobulin antibody (clone rB2M/961). These results demonstrate the foremost specificity of the rB2M/961 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free recombinant Beta-2 Microglobulin antibody (clone rB2M/961) as confirmation of integrity and purity.



IHC testing of FFPE human cervical carcinoma stained with recombinant Beta-2-Microglobulin antibody (rB2M/961). Required HEIR: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

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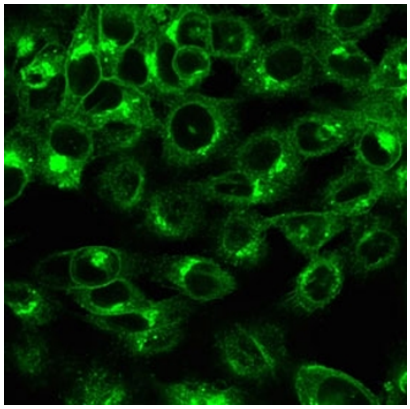
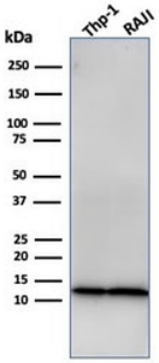


Immunofluorescent staining of permeabilized human HeLa cells with recombinant Beta-2 Microglobulin antibody (clone rB2M/961).



Western blot testing of human THP-1 and Raji cell lysate with recombinant Beta-2 Microglobulin antibody. Expected molecular weight: 12-14 kDa.

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