

## Recombinant Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody

Mouse Monoclonal Antibody [Clone rB2M/961]

Catalog No	Format	Size
567-MSM6-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
567-MSM6-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
567-MSM6-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

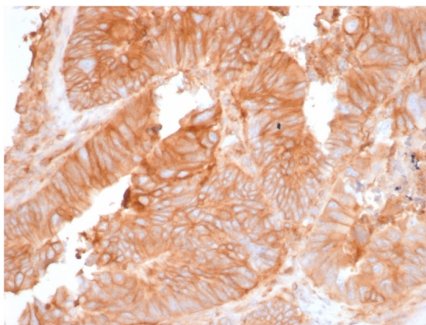
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

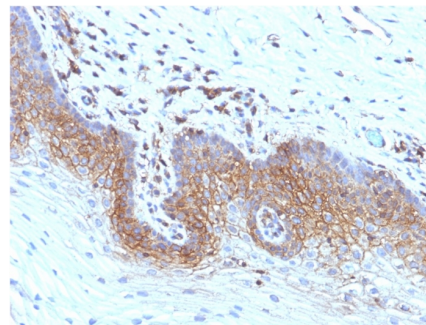
<b>Clone</b>	rB2M/961
<b>Gene Name</b>	B2M
<b>Immunogen</b>	Recombinant human full-length B2M protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b / Kappa
<b>Mol. Weight of Antigen</b>	12kDa
<b>Cellular Localization</b>	Cell surface, Secreted
<b>Species Reactivity</b>	Human, Non-Human primates
<b>Positive Control</b>	Cervix, Endometrial, HL-60 or HeLa cells. Melanomas and Lymphoma. Carcinoma of Stomach, Kidney or Colon. Human kidney tissue lysates.

\*Optimal dilution for a specific application should be determined.

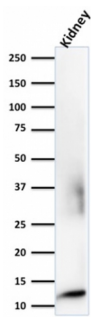
### Product Images for Recombinant Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody



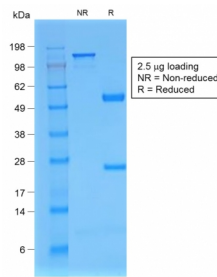
Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Beta2-Microglobulin Mouse Recombinant Monoclonal Antibody (rB/961).



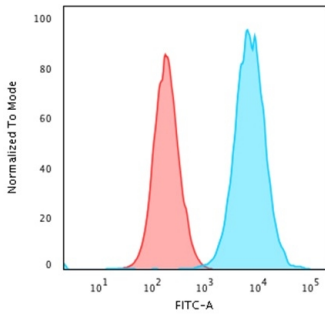
Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with Beta-2-Microglobulin Mouse Recombinant Monoclonal Antibody (rB2M/961).



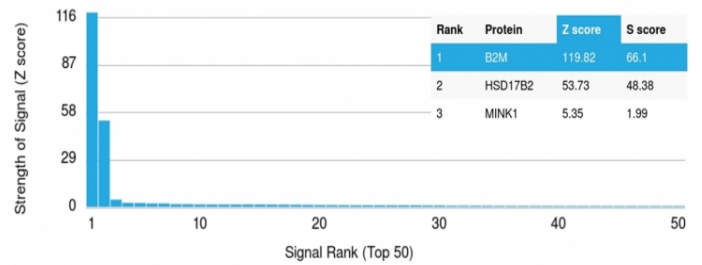
Western Blot Analysis of human kidney tissue lysates using Beta-2-Microglobulin mouse monoclonal antibody (B2M/1118).



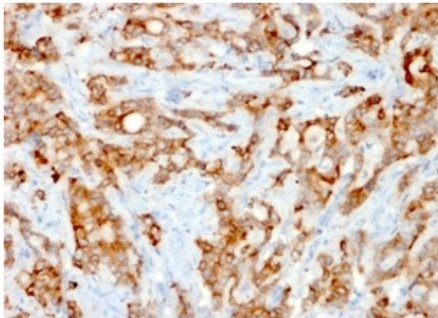
SDS-PAGE Analysis Beta-2-Microglobulin Mouse Recombinant Monoclonal Antibody (rB2M/961). Confirmation of Purity and Integrity of Antibody.



Flow Cytometric Analysis of PFA-fixed HeLa cells using Beta-2-Microglobulin Mouse Recombinant MAb (rB2M/961) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red)



Analysis of Protein Array containing more than 19,000 full-length human proteins using Beta-2 Microglobulin Mouse Recombinant Monoclonal Antibody (rB2M/961). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human Lung Carcinoma stained with Beta-2-Microglobulin Mouse Recombinant Monoclonal Antibody (rB2M/961).

### **Specificity & Comments**

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.

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### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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### **Supplied As**

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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### **Storage and Stability**

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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### **Research Areas**

Cancer, Cardiovascular, Cytokine Signaling, Immuno Oncology, Immunology, Infectious Disease

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