

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

Mouse Monoclonal Antibody [Clone BBM.1]

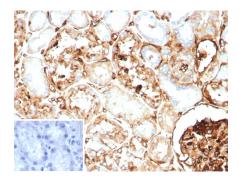
Catalog No	Format	Size
567-MSM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
567-MSM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
567-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

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	

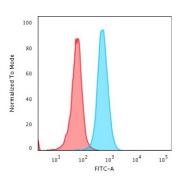
Product Details		
Clone	BBM.1	
Gene Name	B2M	
Immunogen	MOLT-4 human T cell line	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG2b / Kappa	
Mol. Weight of Antigen	12kDa	
Cellular Localization	Cell surface, Secreted	
Species Reactivity	Human, Non-Human primates	
Positive Control	Human cervix, melanoma, lymphoma, endometrium, carcinoma of stomach, kidney or colon. melanomas or lymphoma. Raji, THP-1, HL-60 or HeLa cells.	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

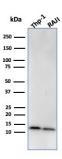
## Product Images for Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody



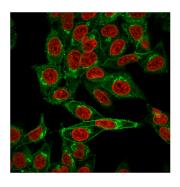
Formalin-fixed, paraffin-embedded human kidney stained with Beta-2-microglobulin Mouse Monoclonal Antibody (BBM.1). Inset: PBS instead of primary antibody; secondary only negative control.



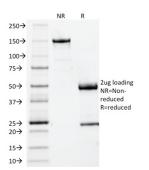
Flow Cytometric Analysis of PFA-fixed HeLa cells using Beta-2-Microglobulin Mouse Monoclonal Antibody (BBM.1); followed by goat anti-mouse IgG-CF488 (Blue); Isotype Control (Red).



Western Blot Analysis of human THP-1 and Raji cell lysate using Beta-2-Microglobulin Mouse Monoclonal Antibody (BBM.1).



Immunofluorescent staining of HeLa cells. Beta-2-Microglobulin Mouse Monoclonal Antibody (BBM.1) followed by goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Reddot (Red)



SDS-PAGE Analysis of Purified Beta-2-Microglobulin Mouse Monoclonal Antibody (BBM.1). Confirmation of Integrity and Purity of Antibody.

#### **Specificity & Comments**

Recognizes a protein of 12kDa, identified as 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.

#### **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.

#### Storage and Stability

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

# **Research Areas**

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

## **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.

