

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

Mouse Monoclonal Antibody [Clone C21.48A1]

Catalog No	Format	Size
567-MSM4-P0	Purified Ab with BSA and Azide	200ug/ml
567-MSM4-P1	Purified Ab with BSA and Azide	200ug/ml
567-MSM4-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml
Applications	Tested Dillution	

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Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Western Blot (WB)	2-4ug/ml

## **Product Details**

Clone	C21.48A1	
Gene Name	B2M	
Immunogen	Soluble beta 2 microglobulin	
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	Cervix, Endometrial, HL-60 or HeLa cells. Melanomas and Lymphoma. Carcinoma of Stomach, Kidney or Colon., Raji, THP-1	

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

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





Western Blot Analysis of THP-1 and Raji cell lysate using Beta-2-Microglobulin Mouse Monoclonal Antibody (C21.48A1).

Flow Cytometric Analysis of PFA-fixed HeLa cells using Beta-2-Microglobulin Mouse Monoclonal Antibody (C21.48A1) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red)





Immunofluorescent staining of HeLa cells. Beta-2-Microglobulin Mouse Monoclonal Antibody (C21.48A1); followed by goat anti-mouse IgG-CF488 (Green).



SDS-PAGE Analysis of Purified Beta-2-Microglobulin Mouse Monoclonal Antibody (C21.48A1). Confirmation of Integrity and Purity of Antibody.

# **Specificity & Comments**

The antibody recognizes the hidden determinant of beta-2 microglobulin (i.e. binding to its determinant is available only when the chain is separated from the HLA heavy chain. Beta-2 microglobulin is a 12KDa protein with a pl of 5.6. Serum beta2 microglobulin levels are a reflection of cell turnover. Levels rise with fever, inflammation, and infection. Increased serum levels are also seen in B-cell malignancies and in renal failure and may indicate a worse prognosis for patients with early-stage Hodgkin's lymphoma. In urine, increased levels are seen in proximal renal tubular disease as well as renal transplant rejection. Beta2 microglobulin levels can rise either because its rate of synthesis has increased (e.g. in AIDS, malignant monoclonal plasma cell dyscrasia, solid tumours and autoimmune disease) or because of impaired renal filtration (e.g. due to renal insufficiency, graft rejection or nephrotoxicity induced by post-transplantation immunosuppressive therapy).

## **Research Areas**

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

### **Known Applications & Suggested Dilutions**

Flow Cytometry (1-2ug/million cells) | Western Blot (1-2ug/ml) | Immunofluorescence (1-2ug/ml) | Optimal dilution for a specific application should be determined.

#### 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.

#### 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.

