

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

Rabbit Monoclonal Antibody [Clone B2M/1857R]

Catalog No	Format	Size
567-RBM7-P0	Purified Ab with BSA and Azide	200ug/ml
567-RBM7-P1	Purified Ab with BSA and Azide	200ug/ml
567-RBM7-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

## **Product Details**

Clone	B2M/1857R
Gene Name	B2M
Immunogen	Recombinant full-length human B2M protein
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / 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.

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

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





SDS-PAGE Analysis PurifiedB2M Rabbit Recombinant Monoclonal Antibody (B2M/1857R). Confirmation of Purity and Integrity of Antibody.

Flow Cytometric Analysis of human HeLa cells using Beta-2-Microglobulin Rabbit Recombinant Monoclonal Antibody (B2M/1857R) followed by goat antimouse IgG-CF488 (Blue); Isotype control (Red).







Western Blot Analysis of THP-1 and Raji cell lysate using B2M Rabbit Recombinant Monoclonal Antibody (B2M/1857R).

Immunofluorescence Analysis of PFA fixed HeLa cells labeling with Beta-2-Microglobulin Rabbit Recombinant Monoclonal Antibody (B2M/1857R); followed by goat anti-rabbit IgG-CF488 (Green).



Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with B2MRabbit Recombinant Monoclonal Antibody (B2M/1857R).

## **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 alphaheavy 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 alphaheavy 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 alphaheavy chain form the peptide antigen-binding cleft. Mutations in the beta-2-Microglobulin gene can enhance the progression of malignant melanoma phenotypes.

#### **Research Areas**

Cardiovascular, Immunology, Cytokine Signaling, Infectious Disease

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

ELISA (For coating, order antibody without BSA) | Flow Cytometry (1-2ug/million cells) | Western Blot (1-2ug/ml),Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes 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&degC followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

#### Supplied As

200ug/ml of Ab purified by Protein A Column. Prepared in 10mM PBS with0.05% 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.

### 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.

