

**Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone BBM.1 ]**  
**Catalog # AH12133**

### Specification

**Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide -**  
**Product Information**

Application	IHC-F, IF, FC
Primary Accession	<a href="#">P61769</a>
Other Accession	<a href="#">567</a> , <a href="#">534255</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Calculated MW	12kDa KDa

**Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide -**  
**Additional Information**

**Gene ID** 567

**Other Names**

Beta-2-microglobulin, Beta-2-microglobulin form pI 5.3, B2M

**Application Note**

IHC-F~~N/A  
IF~~1:50~200  
FC~~1:10~50

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide -**  
**Protein Information**

**Name** B2M ([HGNC:914](#))

**Function**

Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system. Exogenously applied M.tuberculosis EsxA or EsxA-EsxB (or EsxA expressed in host) binds B2M and decreases its export to the cell surface (total protein levels do not change), probably leading to defects in class I antigen presentation (PubMed:<a href="http://www.uniprot.org/citations/25356553" target="\_blank">25356553</a>).

**Cellular Location**

Secreted. Cell surface. Note=Detected in serum and urine (PubMed:1336137, PubMed:7554280).  
{ECO:0000269|PubMed:7554280, ECO:0000269|Ref.6}

### **Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide - Images**

### **Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide - Background**

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 ( $\alpha 1$ ,  $\alpha 2$ ,  $\alpha 3$ ) and a non-covalent associating light chain, known as  $\beta$ -2-Microglobulin.  $\beta$ -2-Microglobulin associates with the  $\alpha 3$  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  $\alpha 1$  and  $\alpha 2$  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.

### **Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide - References**

Brodsky F et al. 1979. Immunol. Rev. 47:3-61. | Brodsky F et al. 1979. Eur. J. Immunol. 9:536-45. | Parham P et al. 1983. J. Biol. Chem. 258(10):6179-86