

Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone B2M/961]
Catalog # AH12138**Specification****Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide - Product Information**

Application	IHC, IF, FC
Primary Accession	P61769
Other Accession	567 , 534255
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~~1:100~500
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:25356553).

Cellular Location

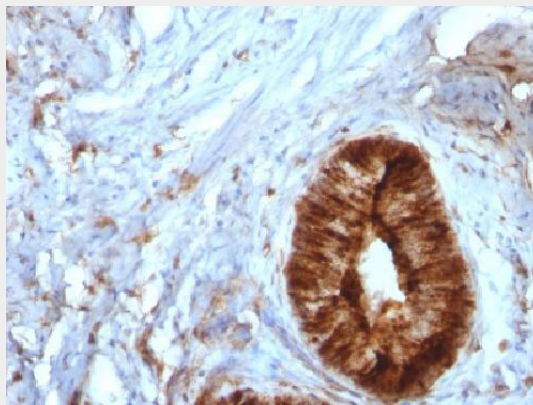
Secreted. Cell surface. Note=Detected in serum and urine (PubMed:1336137, PubMed:7554280).
{ECO:0000269|PubMed:7554280, ECO:0000269|Ref.6}

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

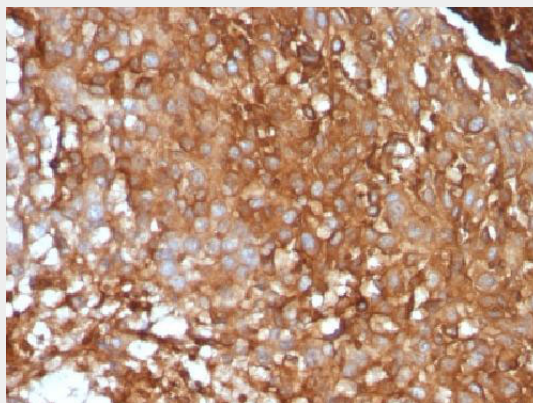
Provided below are standard protocols that you may find useful for product applications.

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

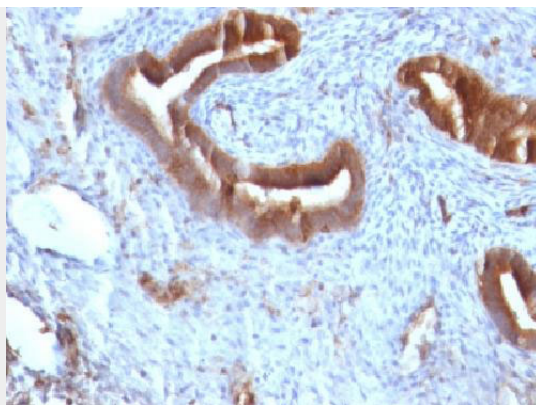
Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide - Images



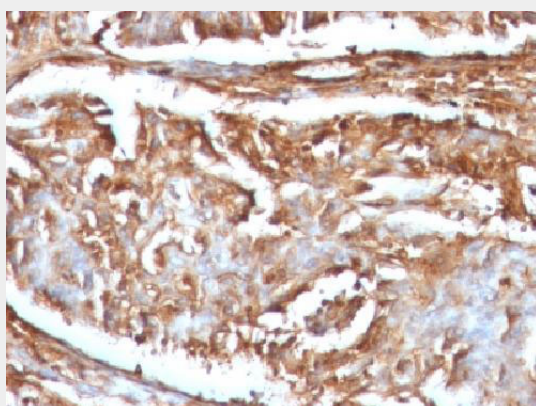
Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961).



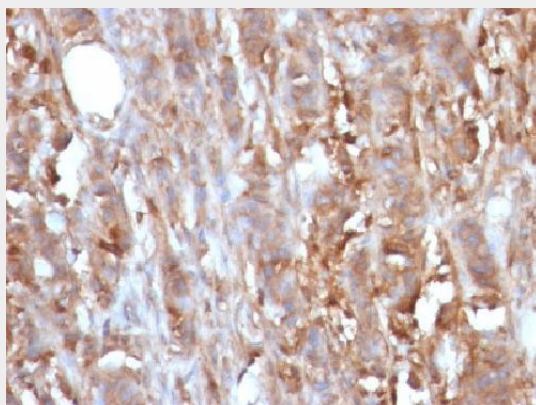
Formalin-fixed, paraffin-embedded human Melanoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961).



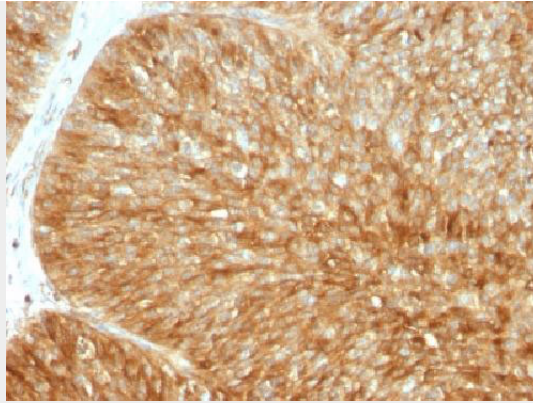
Formalin-fixed, paraffin-embedded human Endometrial Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)



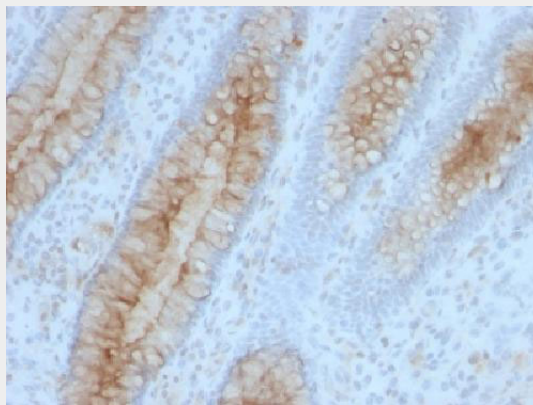
Formalin-fixed, paraffin-embedded human Renal Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)



Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)



Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)

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

Recognizes a protein of 12kDa, identified as β -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 α heavy chain that contains three subdomains (α 1, α 2, α 3) and a non-covalent associating light chain, known as β -2-Microglobulin. β -2-Microglobulin associates with the α 3 subdomain of the α heavy chain and forms an immunoglobulin domain-like structure that mediates proper folding and expression of MHC class 1 molecules. The α 1 and α 2 domains of the α heavy chain form the peptide antigen-binding cleft. Mutations in the β -2-Microglobulin gene can enhance the progression of malignant melanoma phenotypes.

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

Josson, S., et al. 2011. β 2-Microglobulin induces epithelial to mesenchymal transition and confers cancer lethality and bone metastasis in human cancer cells. *Cancer Res.* 71: 2600-2610. |