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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	**,2,3,4,**
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

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).

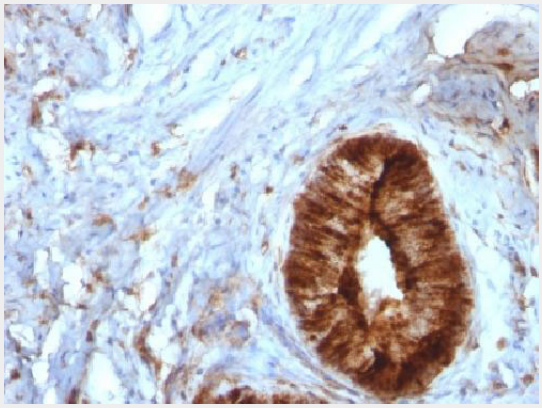
Cellular Location
Secreted. Cell surface. Note=Detected in serum and urine (PubMed:1336137, PubMed:7554280). {ECO:0000269|PubMed:7554280, ECO:0000269|Ref.6}

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

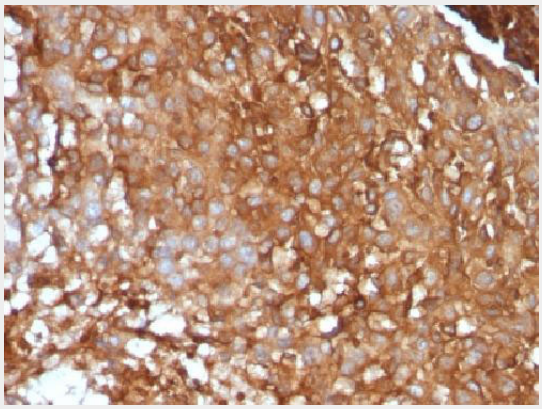
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

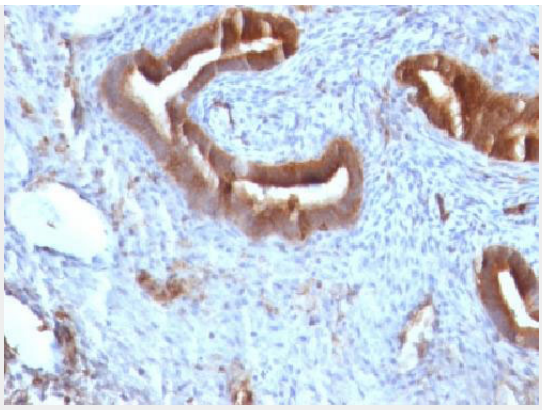


Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961).

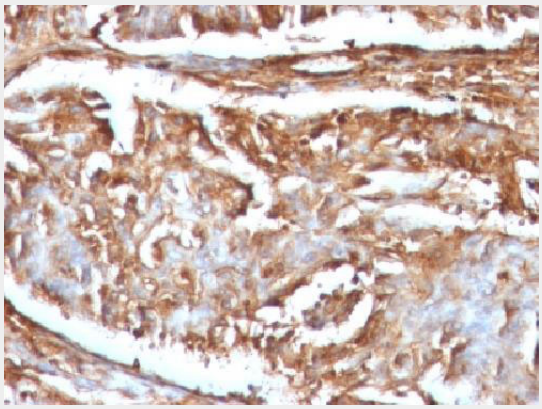


Formalin-fixed, paraffin-embedded human Melanoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961).

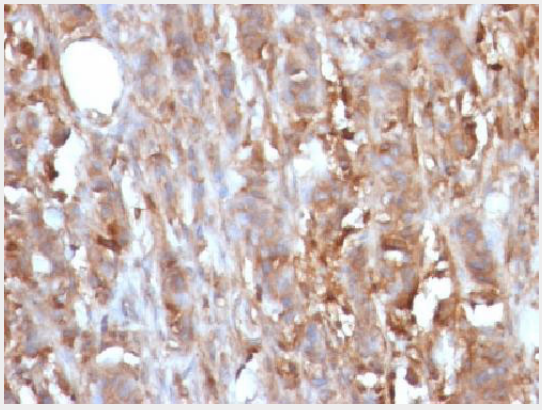
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Formalin-fixed, paraffin-embedded human Endometrial Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)

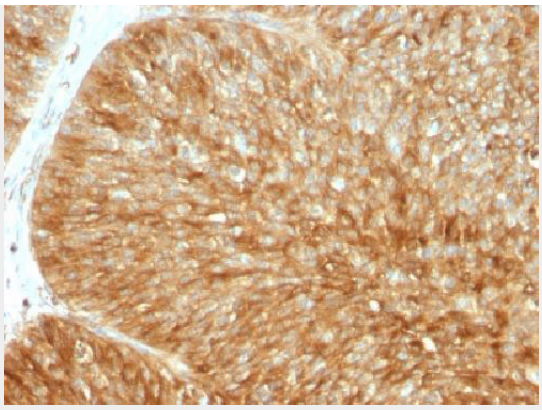


Formalin-fixed, paraffin-embedded human Renal Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)

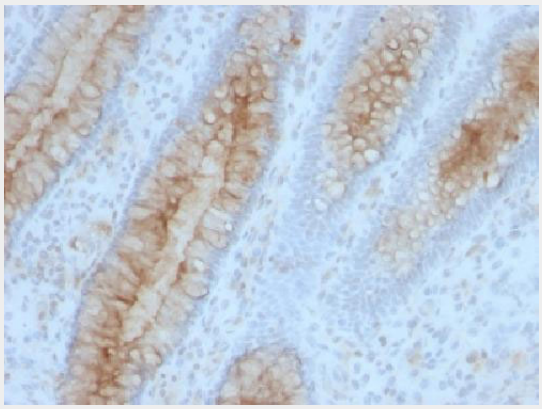


Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with Beta-2-Microglobulin Monoclonal Antibody (B2M/961)

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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 (α1, α2, α3) and a non-covalent associating light chain, known as β-2-Microglobulin. β-2-Microglobulin associates with the α3 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 α1 and α2 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. β2-Microglobulin induces epithelial to mesenchymal transition and confers cancer lethality and bone metastasis in human cancer cells. Cancer Res. 71: 2600-2610. |