10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Beta-2 Microglobulin (Renal Failure & Tumor Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone C21.48A1]
Catalog # AH12135

Specification

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

Application	**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
IF~~1:50~200<br \>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 Cytomety
- 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

The antibody recognizes the hidden determinant of β-2 microglobulin (i.e. binding to its determinant is available only when the chain is separated from the HLA heavy chain. β-2 microglobulin is a 12KDa protein with a pI of 5.6. Serum β2 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. β2 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).

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

Liabeuf A, le Borgne de Kaouel C, Kourilsky FM, Malissen B, Manuel Y, Sanderson AR. An antigenic determinant of human beta 2-microglobulin masked by the association with HLA heavy chains at the cell surface: analysis using monoclonal antibodies. J Immunol. 1981 Oct;127(4):1542-8