

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

Mouse Monoclonal Antibody [Clone SPM374 ]

Catalog # AH12125

## Product Information

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Application	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 / IgG2a, kappa
Clone Names	SPM374
Calculated MW	13715

## Additional Information

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Gene ID	567
Other Names	Beta-2-microglobulin, Beta-2-microglobulin form pI 5.3, B2M
Application Note	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.

## Protein Information

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Name	B2M ( <a href="#">HGNC:914</a> )
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="#">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}

## Background

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Recognizes a protein of 12kDa, identified as  $\beta_2$ -microglobulin. Beta- $\beta_2$ -microglobulin non-covalently associates with the 44kDa  $\alpha_1$  chain to form the HLA Class I antigen complex. Human  $\beta_2$ -microglobulin associated with HLA Class I antigens is expressed on many types of cells including lymphocytes, thymocytes, monocytes, granulocytes, platelets, endothelial cells, and epithelial cells. It is absent on erythrocytes. This MAb is specific to human  $\beta_2$ -microglobulin and does not react with non-human primate cells. This antibody reacts with all cell types excluding erythrocytes. The detection of  $\beta_2$ -microglobulin in body fluids has been used as a tumor marker and for monitoring patients with HIV infection.

## References

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Sparrow RL. Human cell surface antigens defined by monoclonal antibodies. PhD thesis, University of Melbourne, 1983. | Betts RL, McKenzie IFC: Monoclonal antibodies to the major histocompatibility antigens. Monoclonal hybridoma antibodies: Techniques and applications. Edited by D. Hurrel. Uniscience series program. C.R.C. Press, Cleveland, OH: 1983, pp. 193-222 | Brodsky FM, Parham P. Barnstable CJ, Crumpton MJ, Bodmer WF: Monoclonal antibodies for analysis of the HLA system. Immunol Rev 47:3, (1979). | Leah J. Cosgrove et al.: HLA (Class I) antigens on platelets are involved in platelet function. Immunol. Cell Biol., 66 (1) 69-77 (1988) |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.