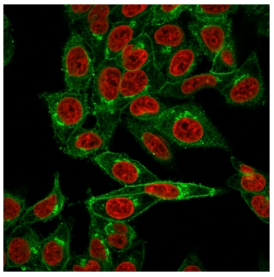
Beta-2 Microglobulin Antibody [clone BBM.1] (V2802)

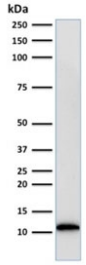
Catalog No.	Formulation	Size
V2802-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2802-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2802SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Citations (11) **Bulk quote request**

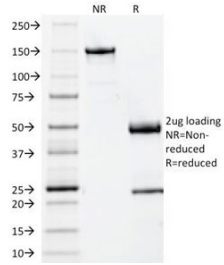
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	BBM.1
Purity	Protein G affinity chromatography
UniProt	P61769
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells Western Blot : 2-4ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Beta-2 Microglobulin antibody is available for research use only.



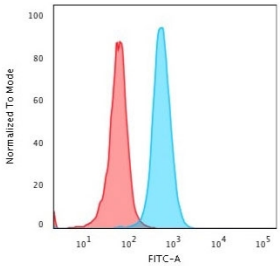
Immunofluorescent staining of permeabilized human HeLa cells with Beta-2 Microglobulin antibody (green, clone BBM.1) and Reddot nuclear stain (red).



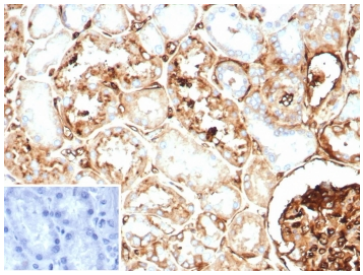
Western blot testing of human Raji cell lysate with Beta-2 Microglobulin antibody (clone BBM.1). Expected molecular weight: 12-14 kDa.



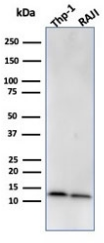
SDS-PAGE Analysis of Purified, BSA-Free Beta-2 Microglobulin Antibody (clone BBM.1). Confirmation of Integrity and Purity of the Antibody.



Flow cytometry testing of PFA-fixed human HeLa cells with Beta-2 Microglobulin antibody (clone BBM.1); Red=isotype control, Blue= Beta-2 Microglobulin antibody.



IHC staining of FFPE human kidney tissue with Beta-2 Microglobulin antibody (clone BBM.1). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human ThP-1 and Raji cell lysate with Beta-2 Microglobulin antibody (clone BBM.1). Expected molecular weight: 12-14 kDa.

Description

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.

Application Notes

Optimal dilution of the Beta-2 Microglobulin antibody should be determined by the researcher.

Immunogen

MOLT-4 human T cell line was used as the immunogen for the Beta-2 Microglobulin antibody.

Storage

Store the Beta-2 Microglobulin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).