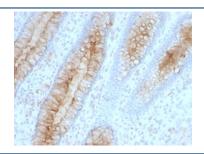


# Beta-2 Microglobulin Antibody [clone B2M/961] (V2804)

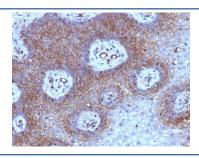
Catalog No.	Formulation	Size
V2804-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2804-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2804SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2804IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

## **Bulk quote request**

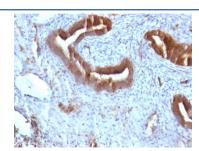
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	B2M/961
Purity	Protein G affinity chromatography
UniProt	P61769
Localization	Cytoplasmic
Applications	Flow Cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-4ug/ml Western Blot: 1-2ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This Beta-2 Microglobulin antibody is available for research use only.



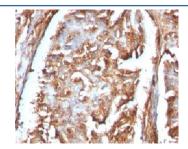
IHC: Formalin-fixed, paraffin-embedded human colon carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



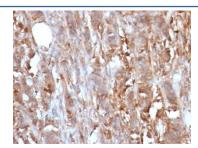
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



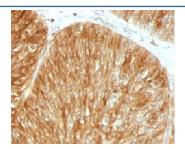
IHC: Formalin-fixed, paraffin-embedded human endometrial carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



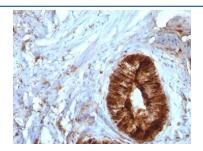
IHC: Formalin-fixed, paraffin-embedded human renal carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



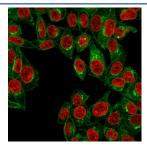
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



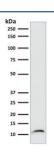
IHC: Formalin-fixed, paraffin-embedded human bladder carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



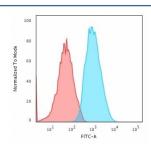
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



Immunofluorescent staining of human HeLa cells with Beta-2 Microglobulin antibody (green, clone B2M/961) and Reddot nuclear stain (red).



Western blot testing of human Raji cell lysate with Beta-2-Microglobulin antibody (clone B2M/961).



Flow cytometry testing of human HeLa cells with Beta-2 Microglobulin antibody (clone B2M/961); Red=isotype control, Blue= Beta-2 Microglobulin antibody.

### Description

Recognizes a protein of 12kDa, identified as beta-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 alpha heavy chain that contains three subdomains (alpha1, alpha2, alpha3) and a non-covalent associating light chain, known as beta-2-Microglobulin. Beta-2-Microglobulin associates with the alpha3 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 alpha1 and alpha2 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.

- 1. Staining of formalin/paraffin tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.
- 2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

#### **Immunogen**

Full length recombinant human protein 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).