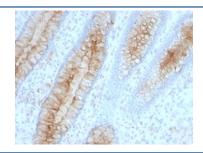


Beta-2 Microglobulin Antibody / B2M [clone B2M/961] (V2804)

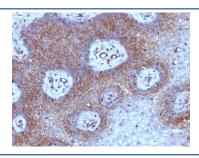
Catalog No.	Formulation	Size
V2804-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2804-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2804SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2804IHC-7ML	Prediluted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

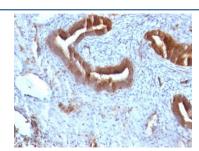
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	B2M/961
Purity	Protein G affinity chromatography
UniProt	P61769
Localization	Cytoplasmic
Applications	Flow Cytometry: 1-2ug/10^6 cells Immunofluorescence: 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.



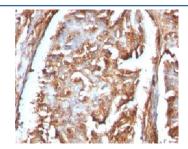
IHC: Formalin-fixed, paraffin-embedded human colon carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



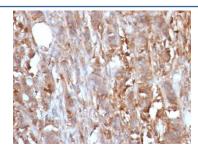
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



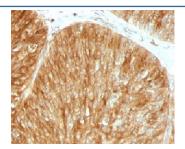
IHC: Formalin-fixed, paraffin-embedded human endometrial carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



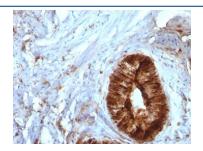
IHC: Formalin-fixed, paraffin-embedded human renal carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



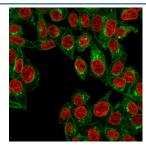
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



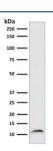
IHC: Formalin-fixed, paraffin-embedded human bladder carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



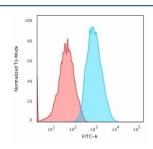
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



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

Beta-2 Microglobulin antibody clone B2M/961 is a monoclonal antibody specific for beta-2 microglobulin, the light chain component of class I MHC molecules. This protein associates with HLA heavy chains on the surface of nucleated cells and enables antigen presentation to cytotoxic T lymphocytes. NSJ Bioreagents offers this antibody for immunology, pathology, and clinical research applications where MHC class I expression and immune function are central.

The antibody produces strong membranous staining in a wide range of tissues, consistent with the broad distribution of MHC class I molecules. In immunology, it supports studies of antigen presentation and immune surveillance. Its detection helps clarify how MHC class I function contributes to viral immunity, tumor recognition, and autoimmunity.

In oncology, beta-2 microglobulin antibody clone B2M/961 has been employed to explore immune evasion strategies in tumors. Reduced expression of this protein can impair antigen presentation and allow tumors to escape T cell detection. Conversely, elevated serum beta-2 microglobulin has been linked to multiple myeloma, lymphoma, and chronic lymphocytic leukemia, where it serves as a prognostic marker. This antibody supports both tissue-level research and biomarker studies in clinical samples.

In transplantation biology, beta-2 microglobulin detection provides insights into graft compatibility and rejection.

Monitoring expression contributes to understanding how immune recognition of donor tissues occurs in relation to class I MHC stability.

Outside of oncology and transplantation, this antibody has applications in nephrology, as beta-2 microglobulin is a marker of renal tubular damage. Its reliable detection therefore bridges both basic immunology and clinical diagnostics.

Validated across tissue and cell-based systems, the antibody consistently produces specific membranous staining with low background. Alternate names include B2M antibody, MHC class I light chain antibody, and class I HLA beta-2 microglobulin antibody.

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).