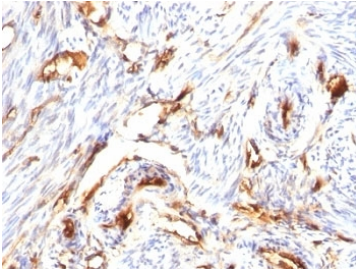


Beta-2 Microglobulin Antibody [clone B2M/1118] (V2800)

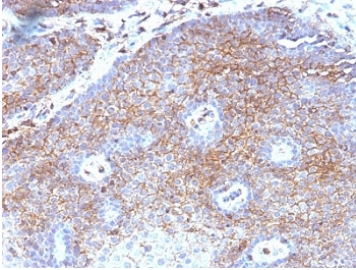
Catalog No.	Formulation	Size
V2800-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2800-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2800SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2800IHC-7ML	Prediluted 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](#)

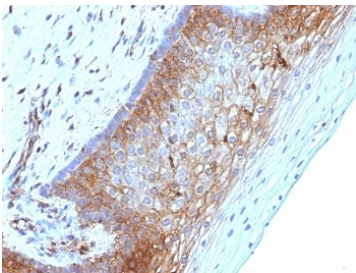
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	B2M/1118
Purity	Protein G affinity chromatography
UniProt	P61769
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This Beta-2 Microglobulin antibody is available for research use only.



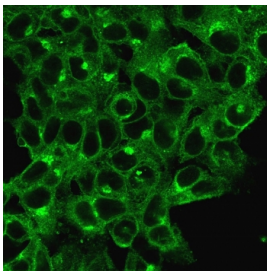
IHC: Formalin-fixed, paraffin-embedded human endometrial carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/1118).



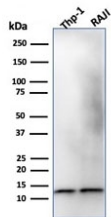
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/1118).



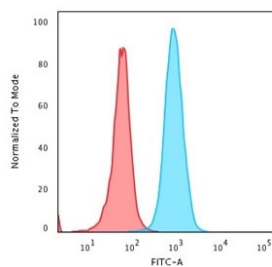
IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/1118).



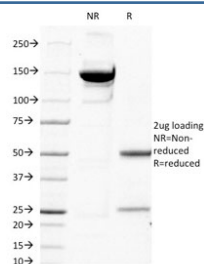
Immunofluorescent staining of permeabilized human HeLa cells with Beta-2-Microglobulin antibody (clone B2M/1118).



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



Flow cytometry testing of permeabilized human HeLa cells with Beta-2-Microglobulin antibody (clone B2M/1118); Red=isotype control, Blue= Beta-2-Microglobulin antibody.



SDS-PAGE analysis of purified, BSA-free Beta-2 Microglobulin antibody (clone B2M/1118) as confirmation of integrity and purity.

Description

Beta-2 Microglobulin antibody clone B2M/1118 is a monoclonal antibody that detects beta-2 microglobulin, a 12 kDa protein that forms the light chain of class I major histocompatibility complex molecules. This protein is non-covalently associated with HLA heavy chains on the surface of nearly all nucleated cells. Beta-2 microglobulin is essential for proper folding and surface expression of class I MHC molecules, which present endogenous peptides to cytotoxic T cells. NSJ Bioreagents provides this antibody for immunology, oncology, and clinical biomarker research.

The antibody produces strong membranous staining in diverse tissues, reflecting the ubiquitous expression of class I MHC. In immunology, beta-2 microglobulin detection supports studies of antigen presentation, immune surveillance, and cytotoxic T cell responses. Because this protein is required for stable MHC class I expression, its presence or absence provides important insights into immune function.

In oncology, detection of beta-2 microglobulin has been applied to research into immune evasion mechanisms. Many tumors downregulate MHC class I expression to avoid recognition by T cells, and monitoring beta-2 microglobulin expression with this antibody supports investigations into tumor-immune interactions. Elevated serum levels of this protein are also associated with hematologic malignancies such as multiple myeloma and lymphoma, making it a valuable biomarker in both tissue and fluid-based assays.

In transplantation research, the antibody is useful for evaluating immune compatibility and rejection risk. Because beta-2 microglobulin is involved in MHC class I presentation, its detection helps clarify mechanisms of graft rejection and tolerance.

The antibody has also been applied in nephrology, where increased urinary levels of beta-2 microglobulin indicate renal tubular dysfunction. This expands its utility beyond oncology and immunology into clinical biomarker research.

Validated in tissue-based and cell-based assays, the antibody consistently provides specific and reproducible results with minimal background. Alternate names include B2M antibody, MHC class I light chain antibody, and HLA-associated 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 B2M 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).