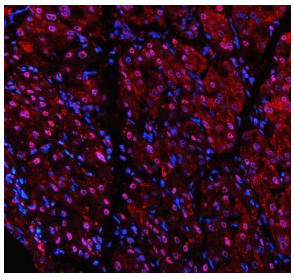
PSMB2 Antibody / Proteasome Core Subunit Antibody (RQ8148)

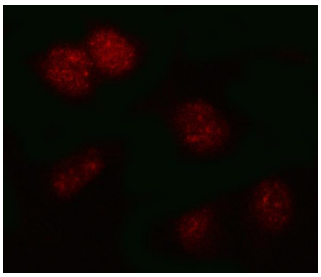
Catalog No.	Formulation	Size
RQ8148	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

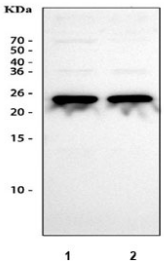
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P49721
Localization	Cytoplasmic, nuclear
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This PSMB2 Antibody / Proteasome Core Subunit Antibody is available for research use only.



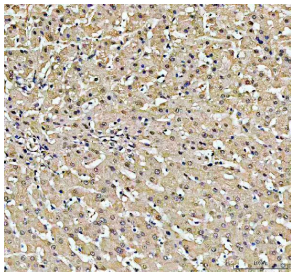
PSMB2 Antibody Human Liver Cancer IF. Immunofluorescent staining of FFPE human liver cancer tissue with PSMB2 antibody (red) at 5 ug/ml. Heat-induced epitope retrieval (HIER) was performed by boiling tissue sections in pH 8 EDTA buffer prior to staining. Nuclei are counterstained with DAPI (blue). PSMB2 immunoreactivity is observed predominantly within the cytoplasm of malignant cells, consistent with the expected localization of this proteasome core subunit that participates in ubiquitin-mediated protein degradation, protein quality control, and maintenance of cellular proteostasis.



PSMB2 Antibody HeLa Cell IF. Immunofluorescent staining of FFPE human HeLa cells with PSMB2 antibody (red). Heat-induced epitope retrieval (HIER) was performed by steaming tissue sections in pH 6 citrate buffer for 20 minutes prior to staining. PSMB2 immunoreactivity is observed predominantly within the cytoplasm with punctate intracellular staining, consistent with the expected localization of this proteasome core subunit that participates in ubiquitin-mediated protein degradation, protein quality control, and maintenance of cellular proteostasis.



Western blot testing of human 1) HeLa and 2) 293T cell lysate with PSMB2 antibody. Predicted molecular weight ~23 kDa.



PSMB2 Antibody Human Liver Cancer IHC. Immunohistochemical staining of FFPE human liver cancer tissue with PSMB2 antibody at 2 ug/ml. Heat-induced epitope retrieval (HIER) was performed by boiling tissue sections in pH 8 EDTA buffer prior to staining. PSMB2 immunoreactivity is observed predominantly within the cytoplasm of malignant hepatocytes, consistent with the expected localization of this proteasome core subunit that participates in ubiquitin-mediated protein degradation, protein quality control, and maintenance of cellular proteostasis. Cell nuclei are counterstained with hematoxylin (blue).

Description

PSMB2 Antibody recognizes Proteasome Subunit Beta Type-2 (PSMB2), an essential catalytic component of the 20S proteasome core particle that participates in the degradation of intracellular proteins. The proteasome is the primary machinery responsible for eliminating damaged, misfolded, and short-lived proteins through the ubiquitin-proteasome system, thereby maintaining cellular protein homeostasis. As a constitutive component of the proteasome core, PSMB2 contributes to regulated protein turnover, cell cycle progression, signal transduction, and stress responses. Consequently, PSMB2 Antibody is widely used to investigate proteasome biology, protein quality control, cancer, and immune regulation.

PSMB2 is expressed in virtually all nucleated cells and forms part of the beta-ring structure within the cylindrical 20S proteasome complex. Together with neighboring alpha and beta subunits, it helps establish the architecture required for efficient proteolysis. The proteasome degrades numerous regulatory proteins involved in transcription, apoptosis, DNA repair, antigen processing, and intracellular signaling, making PSMB2 an indispensable component of normal cellular physiology. Because proteasome activity is fundamental to protein homeostasis, PSMB2 Antibody has become an important research tool for studies of proteostasis and ubiquitin-mediated protein degradation.

Altered proteasome function has been implicated in numerous pathological conditions, including multiple myeloma, leukemia, solid tumors, neurodegenerative diseases, autoimmune disorders, and chronic inflammatory conditions. Dysregulation of proteasome-mediated protein degradation contributes to abnormal cell proliferation, accumulation of damaged proteins, impaired stress responses, and altered immune function. As proteasome inhibitors have become established therapies for several hematologic malignancies, continued investigation of individual proteasome subunits such as PSMB2 has gained increasing importance in both basic and translational research.

NSJ Bioreagents offers highly validated PSMB2 Antibody products for reliable detection of endogenous PSMB2 in human and animal samples. These antibodies support investigations into proteasome function, ubiquitin-mediated protein degradation, cellular proteostasis, antigen processing, and disease mechanisms while providing dependable performance

across western blotting, immunohistochemistry, immunofluorescence, flow cytometry, immunoprecipitation, and related research applications.

Learn more about proteins involved in proteasome function, protein degradation and cellular homeostasis on our Cell Biology Antibodies page.

Application Notes

Optimal dilution of the PSMB2 Antibody / Proteasome Core Subunit Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids M1-S201) was used as the immunogen for the PSMB2 antibody.

Storage

After reconstitution, the PSMB2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Proteasome Subunit Beta Type-2 antibody, Proteasome Beta 2 antibody, Beta 2 Proteasome Subunit antibody, Macropain Beta Chain 2 antibody, C7-I antibody, PSMB2 antibody

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