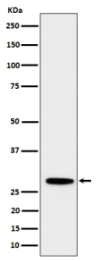
PSMB10 Antibody / Proteasome subunit beta type-10 [clone 30P41] (FY12609)

Catalog No.	Formulation	Size
FY12609	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30P41
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P40306
Applications	Western Blot : 1:500-1:2000 Immunocytochemistry/Immunofluorescence : 1:50-1:200
Limitations	This PSMB10 antibody is available for research use only.



Western blot analysis of PSMB10 expression in human Daudi cell lysate using PSMB10 antibody. Predicted molecular weight ~29 kDa.

Description

PSMB10 antibody detects proteasome subunit beta type-10, an essential catalytic component of the immunoproteasome

encoded by the PSMB10 gene. PSMB10, also called LMP10 or MECL-1, belongs to the peptidase T1 family and contributes to antigen processing for major histocompatibility complex class I presentation. By replacing constitutive catalytic subunits in the proteasome, PSMB10 alters proteolytic specificity, optimizing generation of peptides suitable for immune recognition.

PSMB10 antibody is widely applied in immunology, cancer biology, and infection research. The immunoproteasome is induced by interferon gamma and is enriched in immune tissues such as lymph nodes and spleen. Detection of PSMB10 provides insight into immune activation, antigen presentation, and adaptive immune responses. By monitoring PSMB10 expression, researchers can explore how immunoproteasome activity contributes to pathogen clearance and tumor surveillance.

Western blot assays identify PSMB10 protein bands in interferon-stimulated cells, while immunohistochemistry maps expression in lymphoid tissues. Immunofluorescence highlights cytoplasmic distribution within proteasome complexes. These applications make PSMB10 antibody a valuable tool for studying immune regulation.

PSMB10 has clinical significance in autoimmune disease, cancer, and viral infection. Dysregulated immunoproteasome activity alters antigen presentation, contributing to autoimmunity and chronic inflammation. Elevated PSMB10 expression has been linked to tumor immune evasion and therapy resistance. By applying PSMB10 antibody, scientists can investigate how immunoproteasome function affects immunity and pathology.

PSMB10 antibody from NSJ Bioreagents provides strong specificity for analyzing immunoproteasome biology. Its proven reliability across applications ensures accurate detection of this antigen processing subunit in diverse systems.

Application Notes

Optimal dilution of the PSMB10 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human PSMB10 was used as the immunogen for the PSMB10 antibody.

Storage

Store the PSMB10 antibody at -20oC.