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PSMB9 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8556b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P28065
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22334
Calculated MW	23264
Antigen Region	193-219

Additional Information

Gene ID	5698
Other Names	Proteasome subunit beta type-9, Low molecular mass protein 2, Macropain chain 7, Multicatalytic endopeptidase complex chain 7, Proteasome chain 7, Proteasome subunit beta-1i, Really interesting new gene 12 protein, PSMB9, LMP2, PSMB6i, RING12
Target/Specificity	This PSMB9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 193-219 amino acids from the C-terminal region of human PSMB9.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PSMB9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PSMB9
Synonyms	LMP2, PSMB6i, RING12

Function	The proteasome is a multicatalytic proteinase complex which is characterized by its ability to cleave peptides with Arg, Phe, Tyr, Leu, and Glu adjacent to the leaving group at neutral or slightly basic pH (PubMed:33727065, PubMed:34819510). The proteasome has an ATP-dependent proteolytic activity. This subunit is involved in antigen processing to generate class I binding peptides. Replacement of PSMB6 by PSMB9 increases the capacity of the immunoproteasome to cleave model peptides after hydrophobic and basic residues.
Cellular Location	Cytoplasm {ECO:0000255|PROSITE-ProRule:PRU00809}. Nucleus

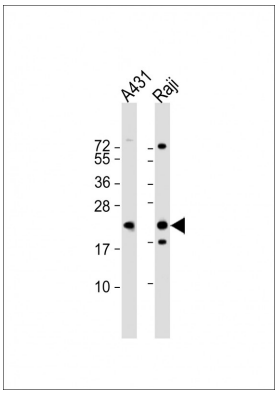
Background

PSMB9 is a member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. The proteasome is a multicatalytic proteinase complex which is characterized by its ability to cleave peptides with Arg, Phe, Tyr, Leu, and Glu adjacent to the leaving group at neutral or slightly basic pH. The proteasome has an ATP-dependent proteolytic activity. This subunit is involved in antigen processing to generate class I binding peptides.

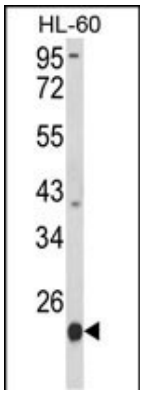
References

Honcharov,S.V., et.al., Fiziol Zh 55 (2), 3-10 (2009)
Moschonas,A., et.al., Mol. Cell. Biol. 28 (20), 6208-6222 (2008)

Images

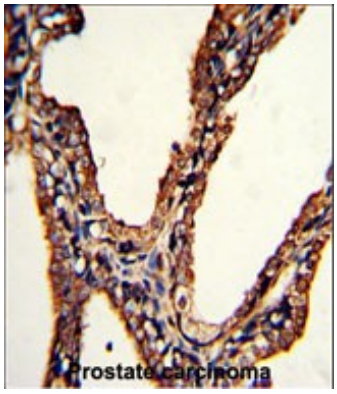


All lanes : Anti-PSMB9 Antibody (C-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

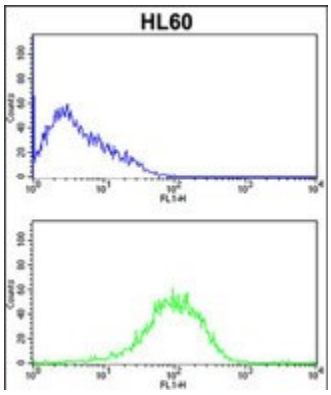


Western blot analysis of PSMB9 Antibody (C-term) (Cat. #AP8556b) in HL-60 cell line lysates (35ug/lane). PSMB9 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human prostate carcinoma reacted with PSMB9 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical



relevance has not been evaluated.



PSMB9 Antibody (C-term) (Cat. #AP8556b) flow cytometric analysis of HL60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.