

### **PSMB9 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8556b

# **Specification**

## PSMB9 Antibody (C-term) - Product Information

Application FC, IHC-P, WB,E

Primary Accession
Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
P28065
Human
Rabbit
Polyclonal
Rabbit IgG
23264
193-219

### PSMB9 Antibody (C-term) - 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**

FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000

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  $2-8^{\circ}$ C for up to 2 weeks. For long term storage store at  $-20^{\circ}$ 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.

### PSMB9 Antibody (C-term) - 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**

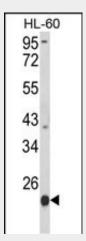
Cytoplasm {ECO:0000255|PROSITE-ProRule:PRU00809}. Nucleus

## PSMB9 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

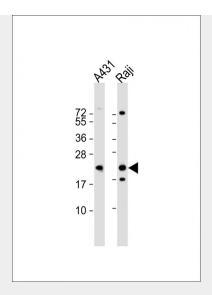
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## PSMB9 Antibody (C-term) - Images



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.

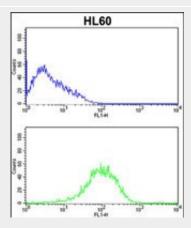




All lanes : Anti-PSMB9 Antibody (C-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: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



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.

# PSMB9 Antibody (C-term) - 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.

# PSMB9 Antibody (C-term) - 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)