

PSMB8 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14577A

Specification

PSMB8 Antibody (N-term) - Product Information

Application	WB, FC,E
Primary Accession	P28062
Other Accession	NP_004150.1 , NP_683720.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30354
Antigen Region	8-36

PSMB8 Antibody (N-term) - Additional Information

Gene ID 5696

Other Names

Proteasome subunit beta type-8, Low molecular mass protein 7, Macropain subunit C13, Multicatalytic endopeptidase complex subunit C13, Proteasome component C13, Proteasome subunit beta-5i, Really interesting new gene 10 protein, PSMB8, LMP7, PSMB5i, RING10, Y2

Target/Specificity

This PSMB8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-36 amino acids from the N-terminal region of human PSMB8.

Dilution

WB~~1:1000
FC~~1:10~50

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

PSMB8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PSMB8 Antibody (N-term) - Protein Information

Name PSMB8

Synonyms LMP7, PSMB5i, RING10, Y2

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. The proteasome has an ATP-dependent proteolytic activity. This subunit is involved in antigen processing to generate class I binding peptides. Replacement of PSMB5 by PSMB8 increases the capacity of the immunoproteasome to cleave model peptides after hydrophobic and basic residues. Involved in the generation of spliced peptides resulting from the ligation of two separate proteasomal cleavage products that are not contiguous in the parental protein (PubMed:[27049119](#)). Acts as a major component of interferon gamma-induced sensitivity. Plays a key role in apoptosis via the degradation of the apoptotic inhibitor MCL1. May be involved in the inflammatory response pathway. In cancer cells, substitution of isoform 1 (E2) by isoform 2 (E1) results in immunoproteasome deficiency. Required for the differentiation of preadipocytes into adipocytes.

Cellular Location

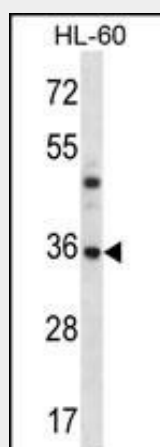
Cytoplasm {ECO:0000255|PROSITE-ProRule:PRU00809}. Nucleus

PSMB8 Antibody (N-term) - Protocols

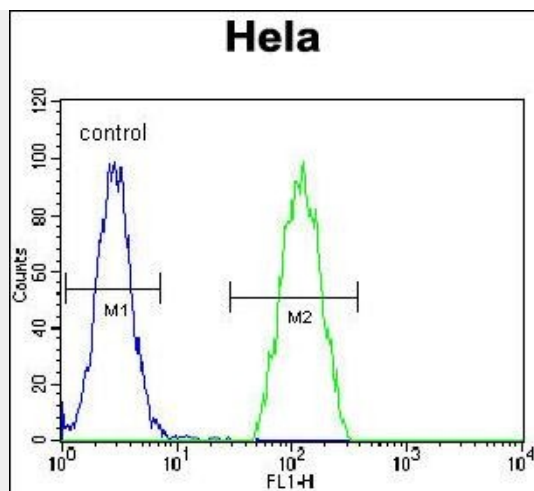
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PSMB8 Antibody (N-term) - Images



PSMB8 Antibody (N-term) (Cat. #AP14577a) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the PSMB8 antibody detected the PSMB8 protein (arrow).



PSMB8 Antibody (N-term) (Cat. #AP14577a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PSMB8 Antibody (N-term) - Background

The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes a member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. This gene is located in the class II region of the MHC (major histocompatibility complex). Expression of this gene is induced by gamma interferon and this gene product replaces catalytic subunit 3 (proteasome beta 5 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. Two alternative transcripts encoding two isoforms have been identified; both isoforms are processed to yield the same mature subunit.

PSMB8 Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Bravo, M.J., et al. Hum. Immunol. 71(7):708-711(2010)
Shi, C., et al. Epidemiol. Infect., 1-9 (2010) In press :
Schuurhof, A., et al. Pediatr. Pulmonol. 45(6):608-613(2010)
Ustrell, V., et al. FEBS Lett. 376(3):155-158(1995)