10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PSMB6 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21651c

Product Information

Application	WB, E
Primary Accession	P28072
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53200
Calculated MW	25358

Additional Information

Gene ID	5694
Other Names	Proteasome subunit beta type-6, Macropain delta chain, Multicatalytic endopeptidase complex delta chain, Proteasome delta chain, Proteasome subunit Y, PSMB6, LMPY, Y
Target/Specificity	This PSMB6 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 151-185 amino acids from the Central region of human PSMB6.
Dilution	WB~~1:2000 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	PSMB6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PSMB6 (HGNC:9543)
Synonyms	LMPY, Y
Function	Component of the 20S core proteasome complex involved in the proteolytic degradation of most intracellular proteins. This complex plays numerous

	essential roles within the cell by associating with different regulatory particles. Associated with two 19S regulatory particles, forms the 26S proteasome and thus participates in the ATP- dependent degradation of ubiquitinated proteins. The 26S proteasome plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins that could impair cellular functions, and by removing proteins whose functions are no longer required. Associated with the PA200 or PA28, the 20S proteasome mediates ubiquitin- independent protein degradation. This type of proteolysis is required in several pathways including spermatogenesis (20S-PA200 complex) or generation of a subset of MHC class I-presented antigenic peptides (20S-PA28 complex). Within the 20S core complex, PSMB6 displays a peptidylglutamyl-hydrolizing activity also termed postacidic or caspase-like activity, meaning that the peptides bond hydrolysis occurs directly after acidic residues.
Cellular Location	Cytoplasm. Nucleus. Note=Translocated from the cytoplasm into the nucleus following interaction with AKIRIN2, which bridges the proteasome with the nuclear import receptor IPO9

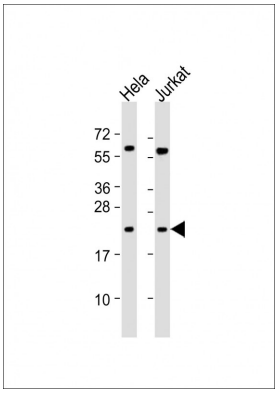
Background

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 unit is responsible of the peptidyl glutamyl-like activity. May catalyze basal processing of intracellular antigens.

References

Akiyama K.-Y.,et al.Science 265:1231-1234(1994).
Bienvenut W.V.,et al.Submitted (DEC-2008) to UniProtKB.
DeMartino G.N.,et al.Biochim. Biophys. Acta 1079:29-38(1991).
Lee L.W.,et al.Biochim. Biophys. Acta 1037:178-185(1990).
Lubec G.,et al.Submitted (MAR-2007) to UniProtKB.

Images



All lanes : Anti-PSMB6 Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat 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 : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.