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PSMB10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12569B

Product Information

Application	WB, E
Primary Accession	P40306
Other Accession	NP_002792.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31189
Calculated MW	28936
Antigen Region	214-242

Additional Information

Gene ID	5699
Other Names	Proteasome subunit beta type-10, Low molecular mass protein 10, Macropain subunit MECl-1, Multicatalytic endopeptidase complex subunit MECl-1, Proteasome MECl-1, Proteasome subunit beta-2i, PSMB10, LMP10, MECL1
Target/Specificity	This PSMB10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 214-242 amino acids from the C-terminal region of human PSMB10.
Dilution	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°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PSMB10 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PSMB10
Synonyms	LMP10, MECL1

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

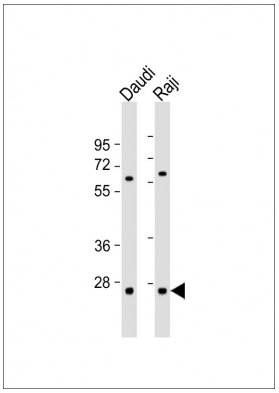
Background

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. Proteolytic processing is required to generate a mature subunit. Expression of this gene is induced by gamma interferon, and this gene product replaces catalytic subunit 2 (proteasome beta 7 subunit) in the immunoproteasome.

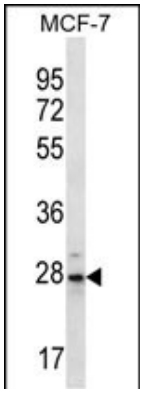
References

Bailey, S.D., et al. Diabetes Care (2010) In press :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Moschonas, A., et al. Mol. Cell. Biol. 28(20):6208-6222(2008)
Liu, Y., et al. DNA Seq. 18(4):257-264(2007)
Listovsky, T., et al. EMBO J. 23(7):1619-1626(2004)

Images



All lanes : Anti-PSMB10 Antibody (C-term) at 1:1000 dilution Lane 1: Daudi 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 : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



PSMB10 Antibody (C-term) (Cat. #AP12569b) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the PSMB10 antibody detected the PSMB10 protein (arrow).