

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 214-242 **Antigen Region**

Additional Information

Gene ID 5699

Other Names Proteasome subunit beta type-10, Low molecular mass protein 10, Macropain

subunit MECI-1, Multicatalytic endopeptidase complex subunit MECI-1, Proteasome MECI-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

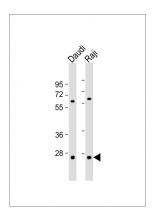
Background

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.

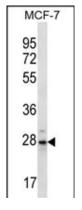
References

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.