

KD-Validated Anti-PSMB8 Mouse Monoclonal Antibody

Mouse monoclonal antibody

Catalog # AGI1972

Product Information

Application	WB
Primary Accession	P28062
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	24GB6765
Calculated MW	30354
Gene Name	PSMB8
Aliases	PSMB8; Proteasome 20S Subunit Beta 8; RING10; PSMB5i; D6S216E; LMP7; Multicatalytic Endopeptidase Complex Subunit C13; Really Interesting New Gene 10 Protein; Proteasome Subunit Beta Type-8; Low Molecular Mass Protein 7; Proteasome Subunit Beta 8; Proteasome Component C13; Macropain Subunit C13; EC 3.4.25.1; Beta5i; Proteasome (Prosome, Macropain) Subunit, Beta Type, 8 (Large Multifunctional Peptidase 7); Proteasome (Prosome, Macropain) Subunit, Beta Type, 8 (Large Multifunctional Protease 7); Proteasome (Prosome, Macropain) Subunit, Beta Type, 8; Large Multifunctional Peptidase 7; Proteasome Catalytic Subunit 3i; Low Molecular Weight Protein 7; Proteasome Subunit Beta 5i; Proteasome Subunit Beta-5i; Proteasome-Related Gene 7; Proteasome Subunit B5i; Protease Component C13; Proteasome Subunit Y2; D6S216; PRAAS1; ALDD; NKJO; JMP; Y2
Immunogen	Recombinant protein of human PSMB8

Additional Information

Gene ID	5696
Other Names	Proteasome subunit beta type-8, 3.4.25.1, 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

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

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