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

KD-Validated Anti-PSMB8 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI1972

Specification

KD-Validated Anti-PSMB8 Mouse Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	P28062
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**Predicted, 30 kDa, observed, 23 kDa KDa**
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**

KD-Validated Anti-PSMB8 Mouse Monoclonal Antibody - 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

KD-Validated Anti-PSMB8 Mouse Monoclonal Antibody - 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.

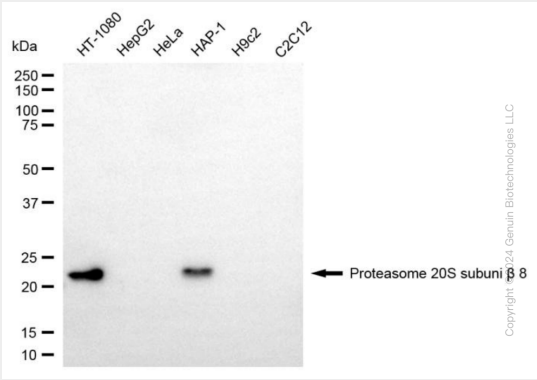
Cellular Location
Cytoplasm {ECO:0000255|PROSITE-ProRule:PRU00809}. Nucleus

KD-Validated Anti-PSMB8 Mouse Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-PSMB8 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-proteasome 20S subunit beta 8 antibody (Cat#AGI1972). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-proteasome 20S subunit beta 8 antibody (Cat#AGI1972, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.

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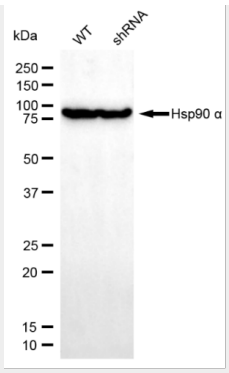

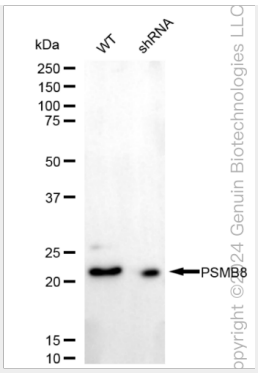

Western blotting analysis using anti-proteasome 20S subunit beta 8 antibody (Cat#AGI1972). Proteasome 20S subunit beta 8 expression in wild-type (WT) and proteasome 20S subunit beta 8 (PSMB8) shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-proteasome 20S subunit beta 8 antibody (Cat#AGI1972, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.