Product Name: KD-Validated PSMB8 Mouse Monoclonal Antibody
Catalog #: KVAb00627
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000
Molecular Weight	Calculated MW: 30.4kDa

Antigen Information

Gene Name	PSMB8
Alternative Names	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

Gene ID	5696.0
SwissProt ID	P28062
Immunogen	Recombinant protein of human PSMB8

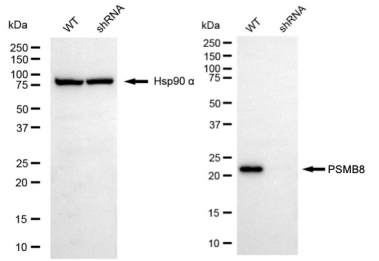
Background

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. This gene is located in the class II region of the MHC (major histocompatibility complex). Expression of this gene is induced by gamma interferon and this gene product replaces catalytic subunit 3 (proteasome beta 5 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. Two alternative transcripts encoding two isoforms have been identified; both isoforms are processed to yield the same mature subunit. [provided by RefSeq, Jul 2008]

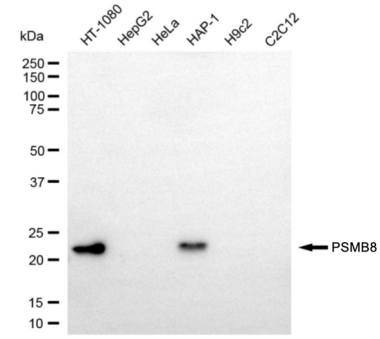
Research Area

Cell Biology,Neuroscience

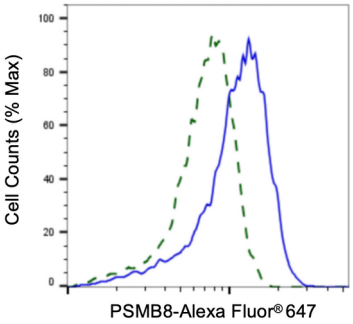
Image Data



Western blotting analysis using PSMB8 antibody (KVAb00627). PSMB8 expression in wild-type (WT) and 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 PSMB8 antibody (KVAb00627, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using PSMB8 antibody (KVAb00627). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PSMB8 antibody (KVAb00627, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Validation of PSMB8 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT-1080 cells were stained with PSMB8 antibody (KVAb00627, 1:2,000) and analyzed using BD flow cytometer.