

Product Name: KD-Validated PSMB10 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01749

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit 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; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 28.9kDa

Antigen Information

Gene Name	PSMB10 PSMB10; Proteasome 20S Subunit Beta 10; LMP10; MECL1; Proteasome (Prosome, Macropain) Subunit, Beta Type, 10; Multicatalytic Endopeptidase Complex Subunit MECL-1; Proteasome Subunit Beta Type-10; Low Molecular Mass Protein 10; Proteasome Subunit
Alternative Names	Beta 10; Proteasome Subunit Beta-2i; Macropain Subunit MECL-1; Proteasome MECL-1; EC 3.4.25.1; MGC1665; Beta2i; Proteasome Catalytic Subunit 2i; Proteasome Subunit Beta 7i; Proteasome Subunit Beta2i; Proteasome Subunit MECL1; Proteasome Subunit B2i; PRAAS5; BETA2I
Gene ID	5699.0
SwissProt ID	P40306
Immunogen	A synthesized peptide derived from human PSMB10

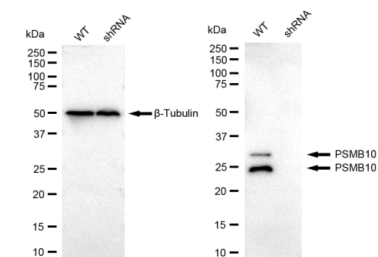
Background

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. [provided by RefSeq, Jul 2008]

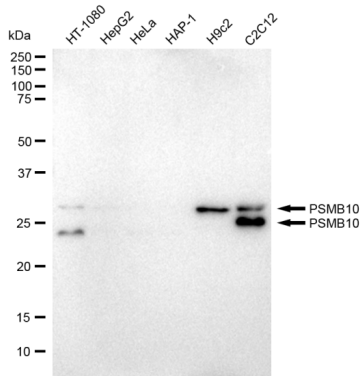
Research Area

Immunology, Cell Biology

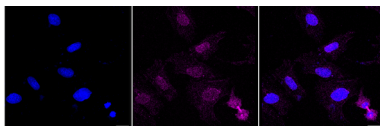
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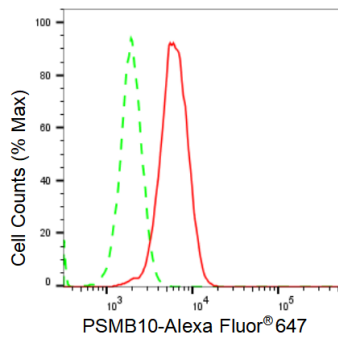
Western blotting analysis using PSMB10 antibody (KVA01749). PSMB10 expression in wild type (WT) and PSMB10 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with PSMB10 antibody (KVA01749, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using PSMB10 antibody (KVA01749). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PSMB10 antibody (KVA01749, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of H9c2 cells with PSMB10 antibody (KVA01749, 1:1,000). Nuclei were stained blue with DAPI; PSMB10 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of PSMB10 expression in H9c2 cells using PSMB10 antibody (KVA01749, 1:2,000). Green, isotype control; red, PSMB10.