

Product Name: KD-Validated PSMD4 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01304**

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: 40.7kDa

Antigen Information

Gene Name	PSMD4
Alternative Names	PSMD4; Proteasome 26S Subunit Ubiquitin Receptor, Non-ATPase 4; AF; Rpn10; AF-1; S5A; Proteasome (Prosome, Macropain) 26S Subunit, Non-ATPase, 4; 26S Proteasome Non-ATPase Regulatory Subunit 4; 26S Proteasome Regulatory Subunit S5A; Proteasome 26S Subunit, Non-ATPase 4; Multiubiquitin Chain-Binding Protein; Antisecretory Factor 1; MCB1; ASF; 26S Proteasome Regulatory Subunit RPN10; S5a/Antisecretory Factor Protein; Angiocidin; PUB-R5
Gene ID	5710.0
SwissProt ID	P55036
Immunogen	A synthesized peptide derived from human PSMD4

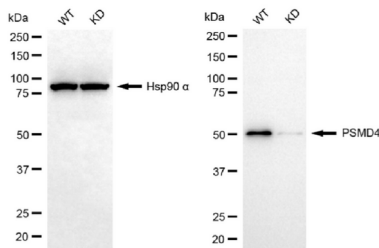
Background

The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core 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. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase 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 one of the non-ATPase subunits of the 19S regulator lid. Pseudogenes have been identified on chromosomes 10 and 21. [provided by RefSeq, Jul 2008]

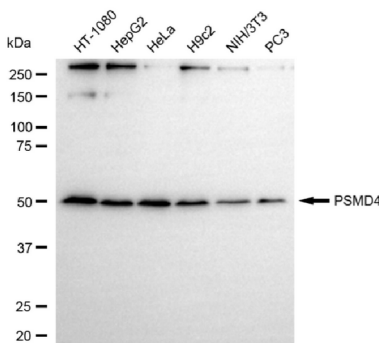
Research Area

Cancer

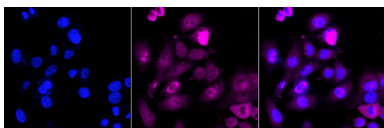
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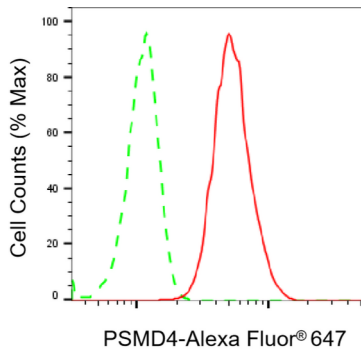
Western blotting analysis using PSMD4 antibody (KVA01304). PSMD4 expression in wild type (WT) and PSMD4 knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with PSMD4 antibody (KVA01304, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using PSMD4 antibody (KVA01304). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PSMD4 antibody (KVA01304, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with PSMD4 antibody (KVA01304, 1:1,000). Nuclei were stained blue with DAPI; PSMD4 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 PSMD4 expression in HepG2 cells using PSMD4 antibody (KVA01304, 1:2,000). Green, isotype control; red, PSMD4.