

Product Name: KD-Validated PSMA1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00905**

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: 29.6kDa

Antigen Information

Gene Name	PSMA1 Proteasome 20S Subunit Alpha 1; PROS30; HC2; NU; Proteasome (Prosome, Macropain)Subunit,Alpha Type,1; Multicatalytic Endopeptidase Complex Subunit C2;
Alternative Names	Proteasome Subunit Alpha Type-1; Proteasome Subunit Alpha 1; 30 KDa Prosomal Protein; Proteasome Component C2;Macropain Subunit C2; Proteasome Nu Chain; MGC14542; MGC14575; MGC14751
Gene ID	5682.0
SwissProt ID	P25786
Immunogen	A synthesized peptide derived from human Proteasome 20S C2

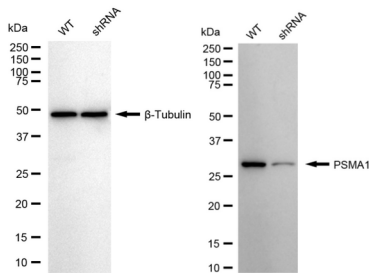
Background

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 peptidase T1A family, that is a 20S core alpha subunit. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Jan 2009]

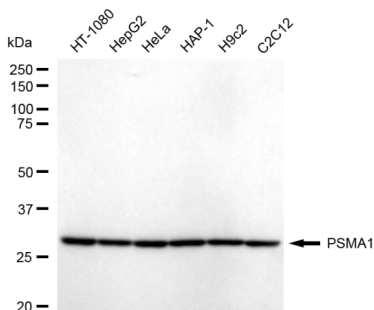
Research Area

Cell Biology, Neuroscience

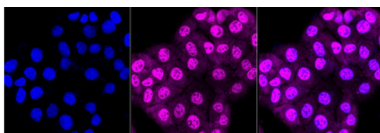
Image Data



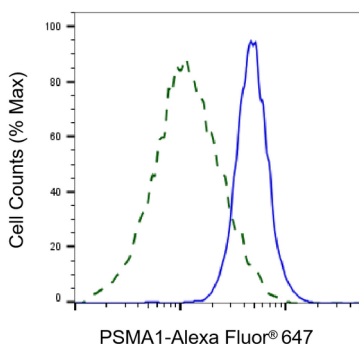
Western blotting analysis using PSMA1 antibody (KVA00905). PSMA1 expression in wild type (WT) and PSMA1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with PSMA1 antibody (KVA00905, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



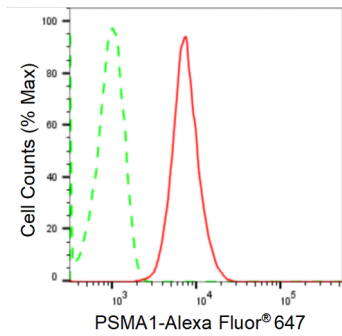
Western blotting analysis using PSMA1 antibody (KVA00905). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PSMA1 antibody (KVA00905, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with PSMA1 antibody (KVA00905, 1:1,000). Nuclei were stained blue with DAPI; PSMA1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.



Validation of PSMA1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with PSMA1 antibody (KVA00905, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PSMA1 expression in HT-1080 cells using PSMA1 antibody (KVA00905, 1:2,000). Green, isotype control; red, PSMA1.