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KD-Validated Anti-PSMA1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1695

Specification

KD-Validated Anti-PSMA1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	P25786
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 30 kDa , observed, 30 kDa KDa**
Gene Name	**PSMA1**
Aliases	**Proteasome 20S Subunit Alpha 1; PROS30; HC2; NU; Proteasome (Prosome, Macropain)Subunit,Alpha Type,1; Multicatalytic Endopeptidase Complex Subunit C2; 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**
Immunogen	**A synthesized peptide derived from human Proteasome 20S C2**

KD-Validated Anti-PSMA1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**5682**

Other Names
Proteasome subunit alpha type-1, 30 kDa prosomal protein, PROS-30, Macropain subunit C2, Multicatalytic endopeptidase complex subunit C2, Proteasome component C2, Proteasome nu chain, Proteasome subunit alpha-6, alpha-6, PSMA1 (HGNC:9530), HC2, NU, PROS30, PSC2

KD-Validated Anti-PSMA1 Rabbit Monoclonal Antibody - Protein Information

Name PSMA1 (HGNC:9530)

Synonyms HC2, NU, PROS30, PSC2

Function
Component of the 20S core proteasome complex involved in the proteolytic degradation of most intracellular proteins. This complex plays numerous essential roles within the cell by associating with different regulatory particles. Associated with two 19S regulatory particles, forms the 26S proteasome and thus participates in the ATP- dependent degradation of ubiquitinated proteins. The 26S proteasome plays a key role in the maintenance of protein homeostasis by removing

misfolded or damaged proteins that could impair cellular functions, and by removing proteins whose functions are no longer required. Associated with the PA200 or PA28, the 20S proteasome mediates ubiquitin- independent protein degradation. This type of proteolysis is required in several pathways including spermatogenesis (20S-PA200 complex) or generation of a subset of MHC class I-presented antigenic peptides (20S-PA28 complex).

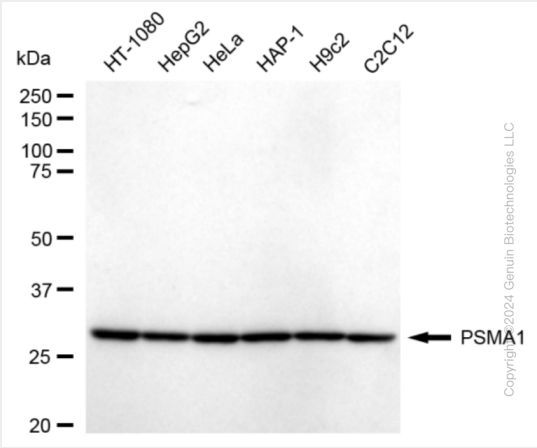
Cellular Location
Cytoplasm. Nucleus. Note=Translocated from the cytoplasm into the nucleus following interaction with AKIRIN2, which bridges the proteasome with the nuclear import receptor IPO9

KD-Validated Anti-PSMA1 Rabbit 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-PSMA1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-PSMA1 antibody (Cat#AGI1695). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PSMA1 antibody (Cat#AGI1695, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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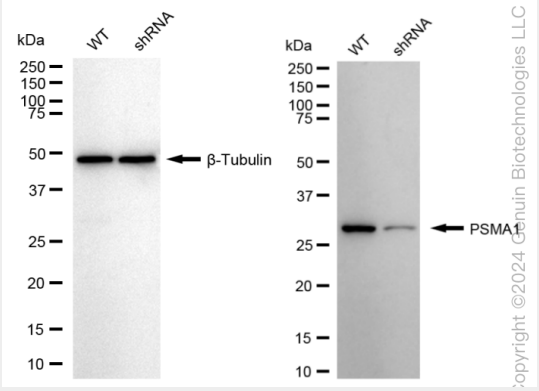
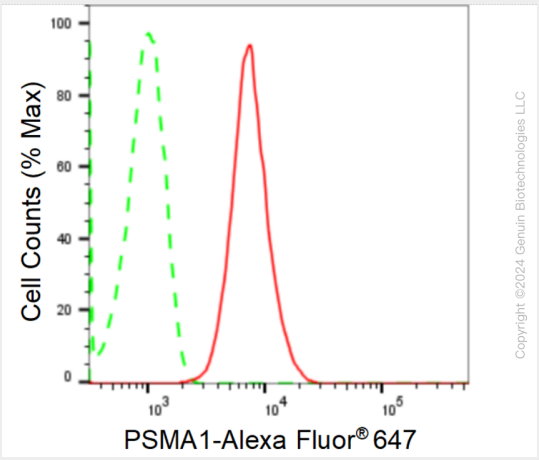


Western blotting analysis using anti-PSMA1 antibody (Cat#AGI1695). PSMA1 expression in wild type (WT) and PSMA1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-PSMA1 antibody (Cat#AGI1695, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of PSMA1 expression in HT-1080 cells using anti-PSMA1 antibody (Cat#AGI1695, 1:2,000). Green, isotype control; red, PSMA1.