

Product datasheet for **TA327325**

Proteasome subunit alpha type 6 (PSMA6) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50- 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human PSMA6
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	proteasome subunit alpha 6
Database Link:	NP_002782 Entrez Gene 26443 Mouse Entrez Gene 29673 Rat Entrez Gene 5687 Human P60900



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Background:

The 20S proteasome is the major proteolytic enzyme complex involved in intracellular protein degradation. It consists of four stacked rings, each with seven distinct subunits. The two outer layers are identical rings composed of α subunits (called PSMA6s), and the two inner layers are identical rings composed of β subunits. While the catalytic sites are located on the β rings, the α subunits are important for assembly and as binding sites for regulatory proteins. Seven different α and ten different β proteasome genes have been identified in mammals. PA700, PA28, and PA200 are three major protein complexes that function as activators of the 20S proteasome. PA700 binds polyubiquitin with high affinity and associates with the 20S proteasome to form the 26S proteasome, which preferentially degrades poly-ubiquitinated proteins. The proteasome has a broad substrate spectrum that includes cell cycle regulators, signaling molecules, tumor suppressors, and transcription factors. By controlling the degradation of these intracellular proteins, the proteasome functions in cell cycle regulation, cancer development, immune responses, protein folding, and disease progression.

Synonyms:

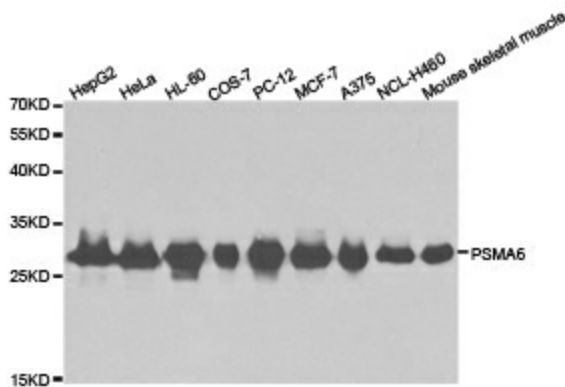
IOTA; p27K; PROS27

Protein Families:

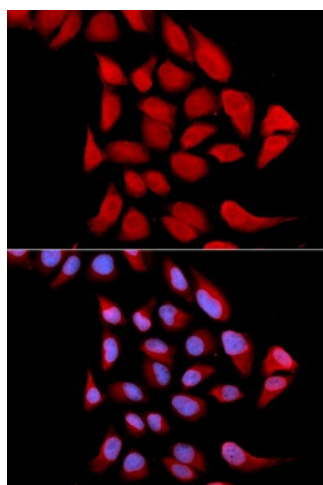
Druggable Genome, Protease, Stem cell - Pluripotency

Protein Pathways:

Proteasome

Product images:

Western blot analysis of extracts of various cell lines, using PSMA6 antibody.



Immunofluorescence analysis of U2OS cell using PSMA6 antibody. Blue: DAPI for nuclear staining.