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PRS4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5113

Product Information

Application	IHC-P, IF, WB
Primary Accession	P62191
Other Accession	P62193, P62192
Reactivity	Human, Mouse, Rat
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49185
Isotype	Rabbit IgG
Antigen Source	Human

Additional Information

Gene ID	5700
Antigen Region	408-436
Other Names	26S protease regulatory subunit 4;26S protease regulatory subunit 4; 26S protease regulatory subunit 4; 26S proteasome AAA-ATPase subunit RPT2; 26S protease regulatory subunit 4; Proteasome 26S subunit ATPase 1
Dilution	IHC-P~~1:100~500 IF~~1:25 WB~~1:1000
Target/Specificity	This PRS4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 408-436 amino acids from the C-terminal region of human PRS4.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PRS4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PSMC1

Function	Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. PSMC1 belongs to the heterohexameric ring of AAA (ATPases associated with diverse cellular activities) proteins that unfolds ubiquitinated target proteins that are concurrently translocated into a proteolytic chamber and degraded into peptides.
Cellular Location	Cytoplasm. Nucleus. Membrane; Lipid-anchor

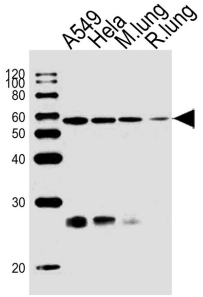
Background

The 26S protease is involved in the ATP-dependent degradation of ubiquitinated proteins. The regulatory (or ATPase) complex confers ATP dependency and substrate specificity to the 26S complex.

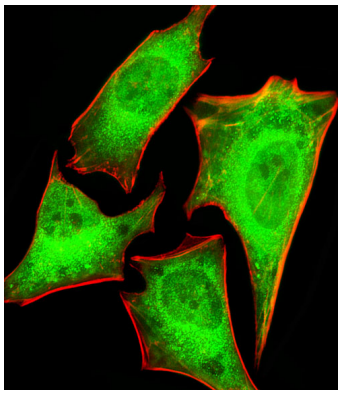
References

Dubiel W., et al. J. Biol. Chem. 267:22699-22702(1992).
Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Matilla A., et al. Hum. Mol. Genet. 10:2821-2831(2001).
Brill L.M., et al. Anal. Chem. 76:2763-2772(2004).
Katiyar S., et al. Proc. Natl. Acad. Sci. U.S.A. 101:13774-13779(2004).

Images

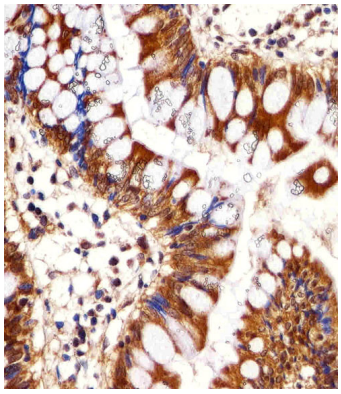


Western blot analysis of lysates from A549,Hela cell line,mouse lung,rat lung tissue (from left to right), using PRS4 Antibody (C-term)(Cat. #AW5113). AW5113 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.



Fluorescent image of Hela cells stained with PRS4 Antibody (C-term)(Cat#AW5113). AW5113 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).

Immunohistochemical analysis of paraffin-embedded H. colon section using PRS4 Antibody (C-term)(Cat#AW5113). AW5113 was diluted at 1:25



dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.