

## PRS4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20440b

### Product Information

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<b>Application</b>	WB, IF, IHC-P, E
<b>Primary Accession</b>	<a href="#">P62191</a>
<b>Other Accession</b>	<a href="#">P62193</a> , <a href="#">P62192</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	49185
<b>Antigen Region</b>	408-436

### Additional Information

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<b>Gene ID</b>	5700
<b>Other Names</b>	26S protease regulatory subunit 4, P26s4, 26S proteasome AAA-ATPase subunit RPT2, Proteasome 26S subunit ATPase 1, PSMC1
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 IF~~1:25 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	PRS4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

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<b>Name</b>	PSMC1
<b>Function</b>	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

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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.

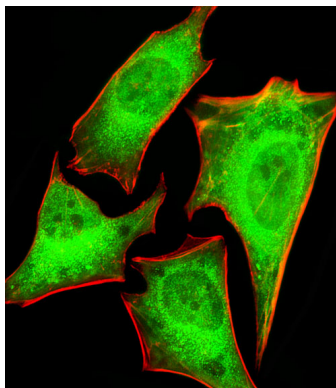
## References

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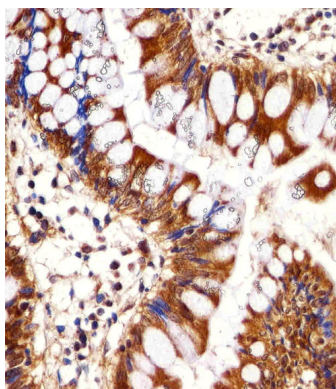
- Dubiel W., et al. J. Biol. Chem. 267:22699-22702(1992).  
Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.  
Matilla A., et al. Hum. Mol. Genet. 10:2821-2831(2001).  
Brill L.M., et al. Anal. Chem. 76:2763-2772(2004).  
Katiyar S., et al. Proc. Natl. Acad. Sci. U.S.A. 101:13774-13779(2004).

## Images

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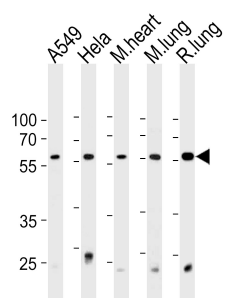


Fluorescent image of HeLa cells stained with PRS4 Antibody (C-term)(Cat#AP20440b). AP20440b was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded H. colon section using PRS4 Antibody (C-term)(Cat#AP20440b). AP20440b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

PRS4 Antibody (C-term) (Cat. #AP20440b) western blot analysis in A549, HeLa cell line and mouse heart and lung, rat lung tissue lysates (35ug/lane). This demonstrates the PRS4 antibody detected the PRS4 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.