

# PSMD4 Polyclonal antibody

Catalog Number: 14899-1-AP

Featured Product

14 Publications

## Basic Information

### Catalog Number:

14899-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6691

### GenBank Accession Number:

BC002365

### GeneID (NCBI):

5710

### UNIPROT ID:

P55036

### Full Name:

proteasome (prosome, macropain)  
26S subunit, non-ATPase, 4

### Calculated MW:

41 kDa

### Observed MW:

50 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10<sup>6</sup> cells in a  
100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB: Jurkat cells, rat spleen tissue, K-562 cells, HeLa cells, NIH/3T3 cells, RAW264.7 cells, Raji cells

IHC: human lung cancer tissue, human testis tissue

IF/ICC: HepG2 cells,

FC (Intra): HepG2 cells,

## Background Information

PSMD4, also named as MCB1, AF or ASF, belongs to the proteasome subunit S5A family. PSMD4 is a 50-kD subunit of the regulatory complex of the 26S proteasome. It binds and presumably selects ubiquitin-conjugates for destruction. PSMD4 displays selectivity for longer polyubiquitin chains. It modulates intestinal fluid secretion. PSMD4 is exposed on the sperm acrosomal surface, a notion that was further supported by the binding of non-cell permeant, biotinylated proteasomal inhibitor ZL3VS to the sperm acrosome. It is involved in the sperm-ZP penetration during fertilization. (PMID: 20526895) This antibody is specific to PSMD4.

## Notable Publications

Author	Pubmed ID	Journal	Application
Monica Benvenuto	34561494	Sci Rep	IHC
Rossella Avagliano Trezza	31235931	Nat Neurosci	WB, IF
Alison Sparks	35735670	FEBS Lett	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

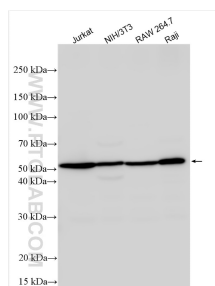
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

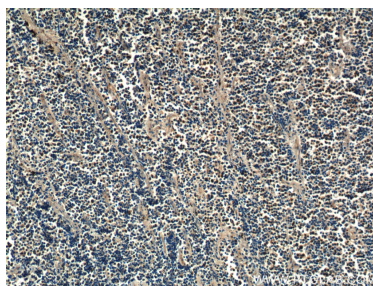
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

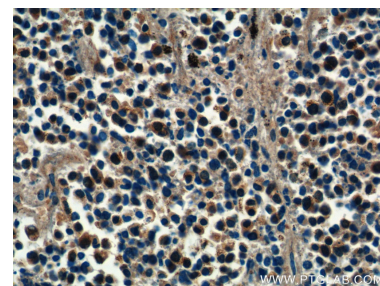
## Selected Validation Data



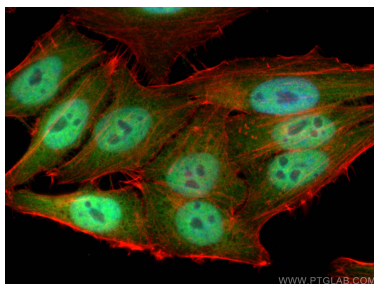
Various lysates were subjected to SDS PAGE followed by western blot with 14899-1-AP (PSMD4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



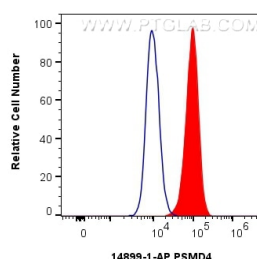
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 14899-1-AP (PSMD4 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 14899-1-AP (PSMD4 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PSMD4 antibody (14899-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.8  $\mu$ g Anti-Human PSMD4 (14899-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.8  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).