### For Research Use Only

# PSMD9 Monoclonal antibody

Catalog Number:67338-1-lg

Featured Product

2 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

67338-1-lg BC004213 GeneID (NCBI): Size: 150ul, Concentration: 1600 ug/ml by 5715

Nanodrop and 940 ug/ml by Bradford  $\,$  UNIPROT ID: method using BSA as the standard; 000233

Source: Full Name: Mouse

proteasome (prosome, macropain) Isotype: 26S subunit, non-ATPase, 9 lgG1

Calculated MW: Immunogen Catalog Number: 27 kDa AG25654 Observed MW:

25-30 kDa

**Purification Method:** 

Protein A purification

CloneNo.: 1H2G1

Recommended Dilutions:

WB 1:2000-1:10000 IHC 1:400-1:1600 IF/ICC 1:400-1:1600

# **Applications**

**Tested Applications:** 

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

Cited Applications: WB, IHC, IF **Species Specificity:** 

human, mouse, rat Cited Species: human, pig

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: A549 cells, HEK-293 cells, NIH/3T3 cells, HSC-T6 cells, K-562 cells, Jurkat cells, LNCaP cells, HeLa cells,

4T1 cells. HepG2 cells

IHC: human cervical cancer tissue, IF/ICC: U2OS cells, HeLa cells

# **Background Information**

PSMD9 is a ubiquitous protein of eukaryotic cells and is a chaperon of the 26S proteasome complex, which degrades ubiquitinated proteins in eukaryotic cells and contributes to the degradation of intracellular proteins into antigenic peptides for antigen presentation by MHC class I cells. The 26S mammalian base sub-complex involves three distinct modules which have ATPase subunits distinctly associated to three chaperones, one of which is PSMD9 regulating the modules assembly. The PSMD9 ubiquitous regulatory role within the proteasome implies its potential pleiotropic effects within different physio-pathological systems. PSMD9 is known to form a stable subcomplex with PSMC3 and PSMC6, two of the AAA-ATPases, assisting in the assembly of the 20S and 19S particles to form the holo complex.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Xuemeng Shi	39601593	J Virol	IF
Yaquan Li	37485655	CNS Neurosci Ther	WB,IHC,IF

### Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

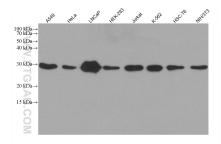
For technical support and original validation data for this product please contact: T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free

in USA), or 1(312) 455-8498 (outside USA)

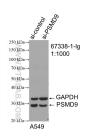
E: proteintech@ptglab.com W: ptglab.com

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

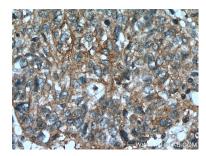
## **Selected Validation Data**



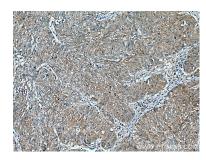
Various lysates were subjected to SDS PAGE followed by western blot with 67338-1-1g (PSMD9 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



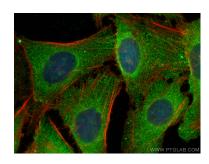
WB result of PSMD9 antibody (67338-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PSMD9 transfected A549 cells.



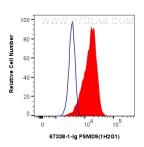
Immunohistochemical analysis of paraffinembedded human cervical cancer tissue slide using 67338-1-Ig (PSMD9 antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human cervical cancer tissue slide using 67338-1-Ig (PSMD9 antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using PSMD9 antibody (67338-1-lg, Clone: 1H2G1) at dilution of 1:800 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug PSMD9 Monoclonal antibody (67338-1-lg, Clone:1H2G1) and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.25 ug Mouse IgG1 isotype control Mouse McAb (66360-1-lg, Clone: 1F8D3) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).