

# PSMD4 Monoclonal antibody

Catalog Number: 66179-1-Ig

## Basic Information

<b>Catalog Number:</b> 66179-1-Ig	<b>GenBank Accession Number:</b> BC002365	<b>Purification Method:</b> Protein G purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 5710	<b>CloneNo.:</b> 3G1A1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P55036	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:20-1:200 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> proteasome (prosome, macropain) 26S subunit, non-ATPase, 4	
<b>Immunogen Catalog Number:</b> AG7010	<b>Calculated MW:</b> 41 kDa	
	<b>Observed MW:</b> 50 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human, mouse, rat

**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:** U2OS cells, HeLa cells, LNCaP cells, HEK-293 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells

**IHC:** human testis tissue,

**IF/ICC:** HeLa cells,

## Background Information

PSMD4, also named as MCB1, AF or ASF, belongs to the proteasome subunit S5A family. 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.

## Storage

**Storage:**

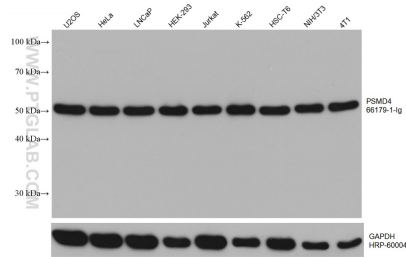
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

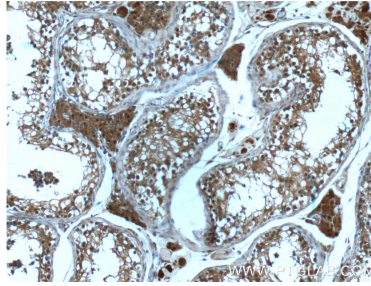
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

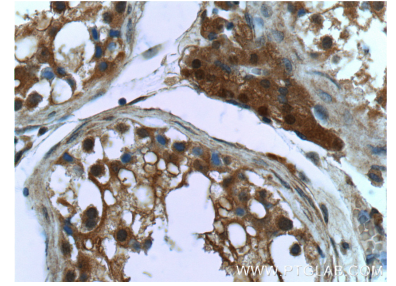
## Selected Validation Data



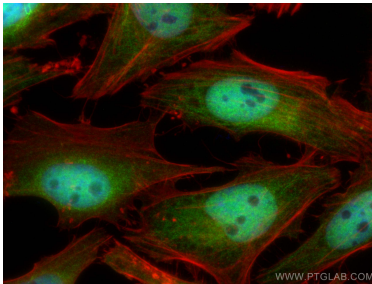
Various lysates were subjected to SDS PAGE followed by western blot with 66179-1-Ig (PSMD4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 66179-1-Ig (PSMD4 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 66179-1-Ig (PSMD4 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PSMD4 antibody (66179-1-Ig, Clone: 3G1A1) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).