

## PSMB8 Monoclonal antibody

Catalog Number: 66759-1-Ig 2 Publications

## Basic Information

<b>Catalog Number:</b> 66759-1-Ig	<b>GenBank Accession Number:</b> BC001114	<b>Purification Method:</b> Protein G purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 5696	<b>CloneNo.:</b> 2A5B6
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P28062	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:500-1:2000 IF-P: 1:200-1:800 IF/ICC: 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional peptidase 7)	
<b>Immunogen Catalog Number:</b> AG6780	<b>Calculated MW:</b> 30 kDa	
	<b>Observed MW:</b> 23 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, ELISA	<b>Positive Controls:</b> <b>WB:</b> Jurkat cells, HSC-T6 cells, Raji cells, Ramos cells <b>IHC:</b> human lung cancer tissue, human liver cancer tissue, human oesophagus cancer tissue, mouse colon tissue, mouse stomach tissue, rat colon tissue, rat stomach tissue <b>IF-P:</b> human lung cancer tissue, human liver cancer tissue <b>IF/ICC:</b> HepG2 cells, HeLa cells
<b>Cited Applications:</b> WB, IHC	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

PSMB8 (Proteasome subunit beta type-8) is also named as LMP7, PSMB5i, RING10, Y2 and belongs to the peptidase T1B family. The gene encodes the chymotrypsin-like catalytic subunit of the immunoproteasome (PMID: 19525961). PSMB8 has a role in controlling pathogenic immune responses and may be a target in autoimmune disorders. Its prosequence is not essential for incorporation of PSMB8 into the maturing proteasome, but it increased the efficiency of PSMB8 incorporation and proteasome maturation (PMID: 10926487). The pro-PSMB8 is a 276aa protein with the molecular mass of 30 kDa, and the mature form is about 23kDa due to the 72aa propeptide cleaved. Defects in PSMB8 are the cause of Nakajo syndrome (NKJO).

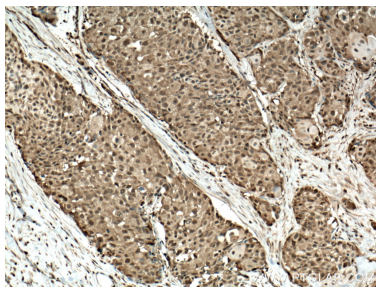
## Notable Publications

Author	Pubmed ID	Journal	Application
Sheng-Wen Chen	39786996	Cell Rep	
Min Li	39733737	Immunobiology	WB, IHC

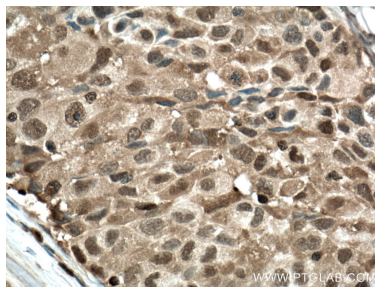
## Storage

**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

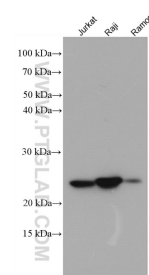
## Selected Validation Data



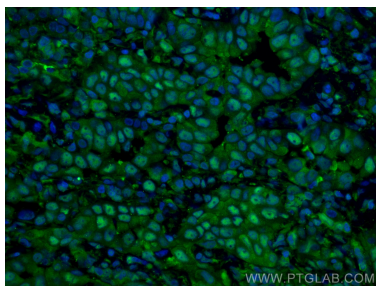
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66759-1-Ig (PSMB8 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



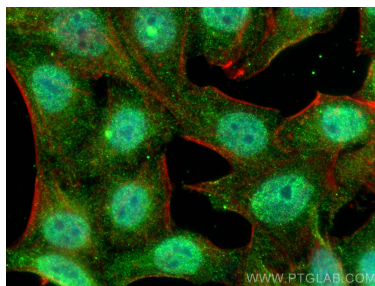
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66759-1-Ig (PSMB8 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 66759-1-Ig (PSMB8 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using PSMB8 antibody (66759-1-Ig, Clone: 2A5B6) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PSMB8 antibody (66759-1-Ig, Clone: 2A5B6) at dilution of 1:800 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002), CL594-phalloidin (red).