

# PSMB7 Monoclonal antibody

Catalog Number: 68641-1-Ig

## Basic Information

<b>Catalog Number:</b> 68641-1-Ig	<b>GenBank Accession Number:</b> BC000509	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 5695	<b>CloneNo.:</b> 3D7B8
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q99436	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:1000-1:4000
<b>Isotype:</b> IgG1	<b>Full Name:</b> proteasome (prosome, macropain) subunit, beta type, 7	
<b>Immunogen Catalog Number:</b> AG6544	<b>Calculated MW:</b> 29.9 kDa	
	<b>Observed MW:</b> 28-30 kDa	

## Applications

**Tested Applications:**

WB, IHC, 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 :** HCT 116 cells, HeLa cells, LNCaP cells, HepG2 cells, HEK-293 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells

**IHC :** human colon cancer tissue, human skin cancer tissue

## Background Information

The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. PSMB7 protein is a member of the proteasome B-type family, also known as the T1B family, and is a 20S core beta subunit in the proteasome. Expression of this catalytic subunit is downregulated by gamma interferon, and proteolytic processing is required to generate a mature subunit. Component of the 20S core proteasome complex are involved in the proteolytic degradation of most intracellular proteins. PSMB7 displays a trypsin-like activity. (PMID:15244466, PMID:27176742, PMID: 8610016)

## Storage

**Storage:**

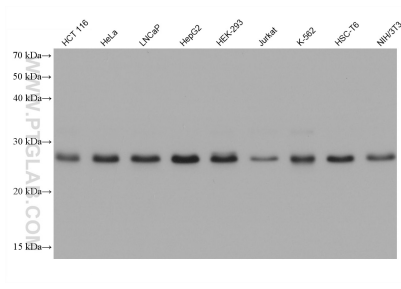
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

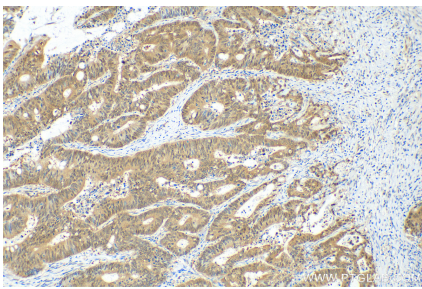
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

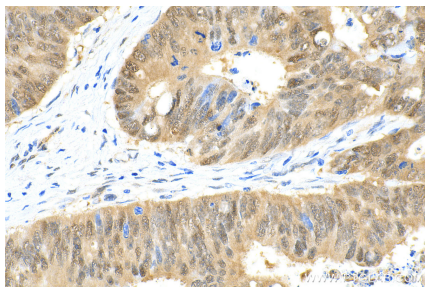
## Selected Validation Data



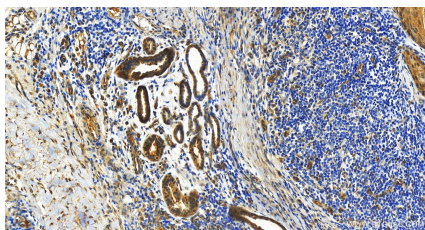
Various lysates were subjected to SDS PAGE followed by western blot with 68641-1-Ig (PSMB7 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 68641-1-Ig (PSMB7 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 68641-1-Ig (PSMB7 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded skin cancer slide using 68641-1-Ig (PSMB7 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).