

## PMS1 Recombinant antibody

Catalog Number: 83456-6-RR

## Basic Information

<b>Catalog Number:</b> 83456-6-RR	<b>GenBank Accession Number:</b> BC096331	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 5378	<b>CloneNo.:</b> 240408D9
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P54277	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:50-1:500 IF/ICC 1:500-1:2000
<b>Isotype:</b> IgG	<b>Full Name:</b> PMS1 postmeiotic segregation increased 1 (S. cerevisiae)	
<b>Immunogen Catalog Number:</b> AG28132	<b>Observed MW:</b> 106 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), ELISA

**Species Specificity:**  
human

**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 :** HeLa cells, HepG2 cells, HEK-293T cells, K-562 cells, Jurkat cells, MOLT-4 cells, HL-60 cells

**IHC :** human ovary cancer tissue,

**IF/ICC :** HeLa cells, Caco-2 cells

## Background Information

PMS1 Homolog 1 is a member of the DNA mismatch repair enzymes (MMREs) which is to eliminate the mismatch of insertions and deletions as a consequence of DNA polymerase errors at DNA synthesis in eukaryotes. PMS1 and MLH1 could form a heterodimer MutL $\beta$  that belongs to MMREs (PMID:25619773). In the MMR system, the MutS complex recognizes the DNA mispairs firstly, and then the MLh1-Pms1 and other associated proteins such as PCNA, RFC, ExoI were recruited, inducing Exonuclease 1 (Exo1)-dependent and -independent MMR pathways (PMID:24981171). Mutations in this gene cause hereditary nonpolyposis colorectal cancer (HNPCC), which is also known as Lynch syndrome. It was reported that PMS1 is a widely expressed protein and located in the nucleus. Alternative splicing allows for 4 isoforms of PMS1 protein.

## 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

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

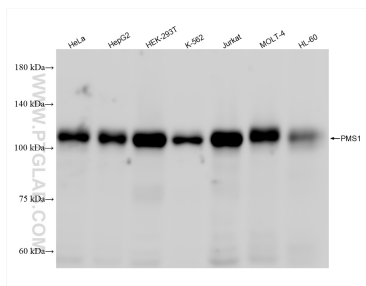
T: 4006900926

E: Proteintech-CN@ptglab.com

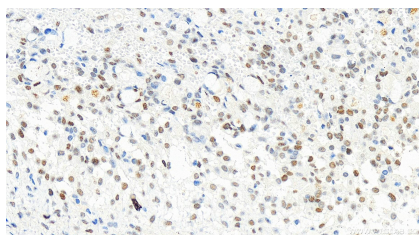
W: ptgcn.com

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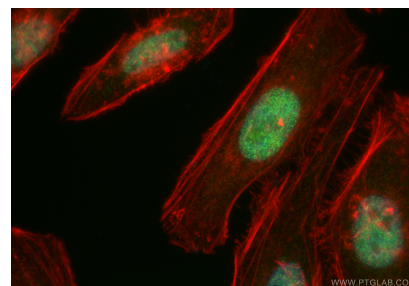
## Selected Validation Data



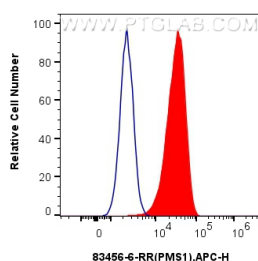
Various lysates were subjected to SDS PAGE followed by western blot with 83456-6-RR (PMS1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



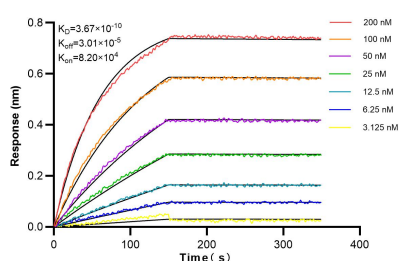
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83456-6-RR (PMS1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PMS1 antibody (83456-6-RR, Clone: 240408D9) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug PMS1 Recombinant antibody (83456-6-RR, Clone:240408D9) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 83456-6-RR against Human PMS1 were performed. The affinity constant is 0.367 nM.