For Research Use Only

## PMS1 Recombinant antibody, PBS Only

Catalog Number:83456-6-PBS



**Purification Method:** 

Protein A purfication

CloneNo.:

240408D9

**Basic Information** 

Catalog Number: 83456-6-PBS

Size: 1 mg/ml GenBank Accession Number:

BC096331

GeneID (NCBI):

5378

Source: UNIPROT ID: Rabbit P54277
Isotype: Full Name:

G PMS1 postmeiotic segregation

Immunogen Catalog Number: increased 1 (S. cerevisiae)

AG28132 Observed MW:

106 kDa

**Applications** 

**Tested Applications:** 

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

Species Specificity:

human

## **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, Exol 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:

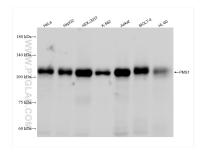
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

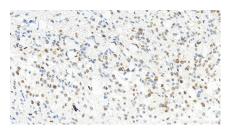
otorage Buffer:

PBS Only

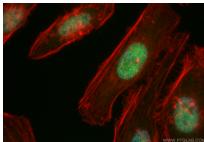
## Selected Validation Data



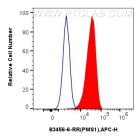
Various lysates were subjected to SDS PAGE followed by western blot with 83456-6-RR (PMS1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83456-6-PBS in a different storage buffer formulation.



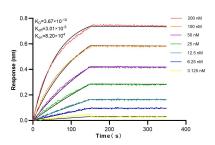
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83456-6-RR (PMS1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83456-6-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 83456-6-PBS in a different storage buffer formulation.



1x10^6 HeLa cells were intracellularly stained with 0.25 ug PMS1 Recombinant antibody (83456-6-RR, Clone:240408D9) and APC-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83456-6-PBS in a different storage buffer formulation.



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