For Research Use Only

## PMS2 Recombinant antibody, PBS Only

Catalog Number:84894-5-PBS



**Purification Method:** 

Protein A purfication

CloneNo.:

242455F8

**Basic Information** 

Catalog Number: 84894-5-PBS

 Concentration:
 GeneID (NCBI):

 1 mg/ml
 5395

 Source:
 UNIPROT ID:

Source: UNIPROT ID:
Rabbit P54278

Isotype: Full Name:
IgG PMS2 postmeiotic segregation

Immunogen Catalog Number:

AG33508

Calculated MW: 862 aa, 96 kDa

GenBank Accession Number:

increased 2 (S. cerevisiae)

Observed MW: 117 kDa

BC093921

**Applications** 

**Tested Applications:** 

WB, IHC, FC (Intra), Indirect ELISA

Species Specificity:

human

## **Background Information**

PMS2, also named as PMSL2, belongs to the DNA mismatch repair mutL/hexB family. It is a component of the post-replicative DNA mismatch repair system (MMR). It heterodimerizes with MLH1 to form MutL alpha. MulL alpha (MLH1-PMS2) interacts physically with the clamp loader subunits of DNA polymerase III, suggesting that it may play a role to recruit the DNA polymerase III to the site of the MMR. It also implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis in case of major DNA damages. (PMID: 16873062, PMID: 18206974) Defects in PMS2 are the cause of hereditary non-polyposis colorectal cancer type 4 (HNPCC4). Defects in PMS2 are a cause of mismatch repair cancer syndrome (MMRCS).

Storage

Storage:

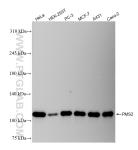
Store at -80°C.

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

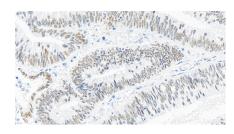
Storage Buffer

PBS Only

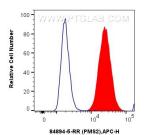
## **Selected Validation Data**



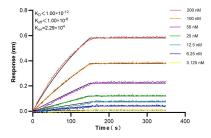
Various lysates were subjected to SDS PAGE followed by western blot with 84894-5-RR (PMS2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84894-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 84894-5-RR (PMS2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84894-5-PBS in a different storage buffer formulation.



1x10^6 MCF-7 cells were intracellularly stained with 0.25 ug PMS2 Recombinant antibody (84894-5-RR, Clone:242455F8) and APC-Conjugated Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 84894-5-PBS in a different storage buffer



Biolayer interferometry (BLI) kinetic assays of 84894-5-RR against Human PMS2 were performed. The affinity constant is below 1 pM.