#### For Research Use Only

# PMS2 Polyclonal antibody

Catalog Number: 18164-1-AP 1 Publications



**Basic Information** 

Catalog Number:

18164-1-AP

GenBank Accession Number:

BC093921

GeneID (NCBI): Size: 150ul , Concentration: 350 ug/ml by

Nanodrop: **UNIPROT ID:** P54278

Rabbit Full Name:

Isotype: PMS2 postmeiotic segregation increased 2 (S. cerevisiae) IgG

Immunogen Catalog Number: Calculated MW:

862 aa, 96 kDa AG12651

> Observed MW: 117 kDa, 100 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: A431 cells, PC-3 cells, Jurkat cells, MCF-7 cells,

**Purification Method:** 

WB: 1:2000-1:10000

IHC: 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

Raji cells

IHC: human ovary cancer tissue, human colon cancer

## **Background Information**

PMS2, also named as PMSL2, belongs to the DNA mismatch repair mutL/hexB family. It is a component of the postreplicative DNA mismatch repair system (MMR). It heterodimerizes with MLH1 to form MutLalpha. MulLalpha (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). This antibody is specific to PMS2. The calculated molecular weight of PMS2 is 96 kDa, but the modified PMS2 is about 117 kDa.(PMID: 11358834)

#### **Notable Publications**

Author **Pubmed ID** Application **Baining Zhang** 38284902 Aging (Albany NY)

Storage

Storage:

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

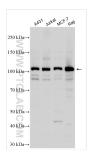
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

### **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 18164-1-AP (PMS2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human colon cancer slide using 18164-1-AP (PMS2 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 18164-1-AP (PMS2 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).