For Research Use Only

PMS1 Monoclonal antibody

Catalog Number:68413-1-lg 1 Publications



Basic Information

Applications

Catalog Number: 68413-1-lg

Size: 1000 µg/ml Source: Mouse Isotype: IgG2a

Immunogen Catalog Number:

AG28127

Tested Applications:

IF/ICC, WB, ELISA Cited Applications:

Species Specificity:

Human Cited Species: human

GenBank Accession Number:

BC096331 GeneID (NCBI): 5378 **UNIPROT ID:** P54277

PMS1 postmeiotic segregation increased 1 (S. cerevisiae)

Observed MW: 106 kDa

Full Name:

Purification Method: Protein A purification

CloneNo.:

1A6G3 Recommended Dilutions:

WB 1:5000-1:50000 IF/ICC 1:500-1:2000

Positive Controls:

WB: Caco-2 cells, HeLa cells, HepG2 cells, LNCaP cells, HEK-293 cells, MOLT-4 cells, K-562 cells, HL-60 cells,

Jurkat cells

IF/ICC: 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 β 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Zachariah L McLean	38609352	Nat Commun	WB

Storage

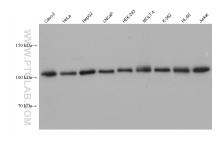
Storage:

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

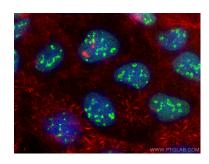
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68413-1-1g (PMS1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed Caco-2 cells using PMS1 antibody (68413-1-Ig, Clone: 1A6G3) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).