

PMS2
Rabbit Monoclonal antibody(Mab)
Catalog # AD80243**Specification**

PMS2 - Product info

Application	IHC-P
Primary Accession	P54278
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	95797

PMS2 - Additional info

Gene ID	5395
Gene Name	PMS2 (HGNC:9122)

Other Names

Mismatch repair endonuclease PMS2, 3.1.-., DNA mismatch repair protein PMS2, PMS1 protein homolog 2, PMS2 (HGNC:9122)

Dilution

IHC-P~~Ready-to-use

Storage

Maintain refrigerated at 2-8°C

Precautions

PMS2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PMS2 - Protein Information

Name PMS2 ([HGNC:9122](#))

Function

Component of the post-replicative DNA mismatch repair system (MMR). Heterodimerizes with MLH1 to form MutL alpha. DNA repair is initiated by MutS alpha (MSH2-MSH6) or MutS beta (MSH2-MSH3) binding to a dsDNA mismatch, then MutL alpha is recruited to the heteroduplex. Assembly of the MutL-MutS-heteroduplex ternary complex in presence of RFC and PCNA is sufficient to activate endonuclease activity of PMS2. It introduces single-strand breaks near the

mismatch and thus generates new entry points for the exonuclease EXO1 to degrade the strand containing the mismatch. DNA methylation would prevent cleavage and therefore assure that only the newly mutated DNA strand is going to be corrected. MutL 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. Also implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis in case of major DNA damages.

Nucleus.

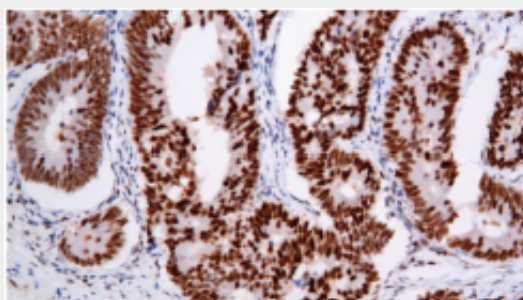
Cellular Location

PMS2 - Protocols

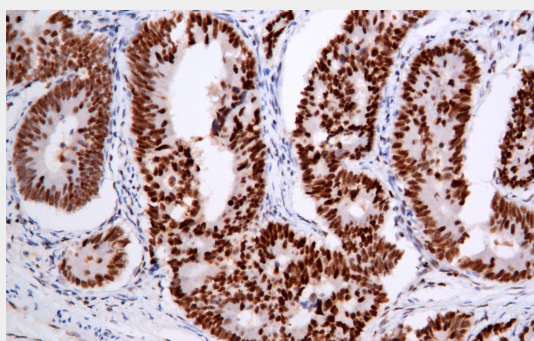
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PMS2 - Images



Colon cancer



Immunohistochemical analysis of paraffin-embedded colorectal carcinoma; tissue using AD80243 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH 9.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems [Abcepta:AR005] was used as the secondary antibody.