

### Postmeiotic Segregation Increased 2(PMS2) (PT2116) Mouse mAb

YM6220 Catalog No:

Reactivity: Human; Mouse;

IHC;ELISA **Applications:** 

PMS2 **Target:** 

Fields: >>Mismatch repair;>>Fanconi anemia pathway

**Gene Name:** PMS2 PMSL2

**Protein Name:** Postmeiotic Segregation Increased 2(PMS2)

**Human Gene Id:** 5395

**Human Swiss Prot** 

No:

Synthesized peptide derived from human Postmeiotic Segregation Increased Immunogen:

2(PMS2) AA range: 600-700

The antibody can specifically recognize human PMS2 protein. **Specificity:** 

PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA Formulation:

Source: Mouse, Monoclonal/IgG1, kappa

P54278

**Dilution:** IHC 1:50-100. ELISA 1:500-5000

**Purification:** The antibody was affinity-purified from ascites by affinity-chromatography using

specific immunogen.

-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:** 

**Molecularweight:** 96kD

**Observed Band:** 110kD

1/3



#### **Background:**

The protein encoded by this gene is a key component of the mismatch repair system that functions to correct DNA mismatches and small insertions and deletions that can occur during DNA replication and homologous recombination. This protein forms heterodimers with the gene product of the mutL homolog 1 (MLH1) gene to form the MutL-alpha heterodimer. The MutL-alpha heterodimer possesses an endonucleolytic activity that is activated following recognition of mismatches and insertion/deletion loops by the MutS-alpha and MutS-beta heterodimers, and is necessary for removal of the mismatched DNA. There is a DQHA(X)2E(X)4E motif found at the C-terminus of the protein encoded by this gene that forms part of the active site of the nuclease. Mutations in this gene have been associated with hereditary nonpolyposis colorectal cancer (HNPCC; also known as Lynch syndrome) and Turcot syndrome

#### **Function:**

disease:Defects in PMS2 are a cause of mismatch repair cancer syndrome (MMRCS) [MIM:276300]; also known as Turcot syndrome and brain tumor-polyposis syndrome 1 (BTPS1). MMRCS is an autosomal dominant disorder characterized by malignant tumors of the brain associated with multiple colorectal adenomas. Skin features include sebaceous cysts, hyperpigmented and cafe au lait spots., disease:Defects in PMS2 are the cause of hereditary non-polyposis colorectal cancer type 4 (HNPCC4) [MIM:600259]. Mutations in more than one gene locus can be involved alone or in combination in the production of the HNPCC phenotype (also called Lynch syndrome). Most families with clinically recognized HNPCC have mutations in either MLH1 or MSH2 genes. HNPCC is an autosomal, dominantly inherited disease associated with marked increase in cancer susceptibility. It is characterized by a familial predisposition to ear

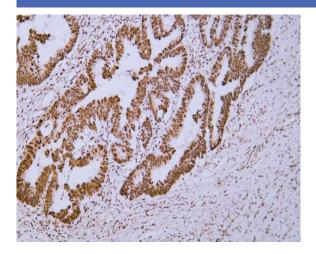
# Subcellular Location:

Nuclear

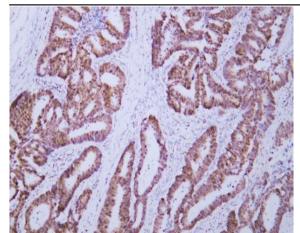
**Expression:** 

Amygdala, Brain, Endometrial tumor, Epithelium, Human endometri

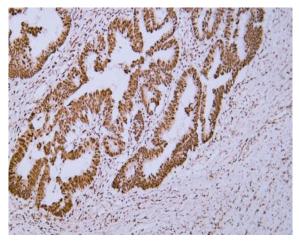
## **Products Images**



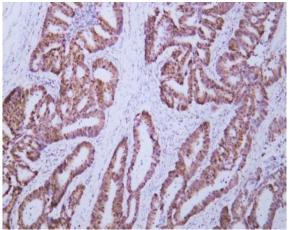
Human colon carcinoma tissue was stained with Anti-PMS2 (ABT016) Antibody



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