PMS2 monoclonal antibody, clone 1204

Catalog # MAB2089 Size 100 ug

Applications

Western Blot (Cell lysate)

Western blot analysis is shown using PMS2 monoclonal antibody, clone 1204 (Cat # MAB2089) to detect human PMS2 protein present in H157 cell lysates. Approximately 5, 10 and 30 ug of cell lysate was loaded on a 4-12% NuPage SDS-PAGE gel using MES buffer.
A single band of ~96 KDa corresponding to the expected molecular weight for human PMS2 protein.
Personal communication Morphotek Inc.

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant PMS2.
Immunogen	Recombinant protein corresponding to the first 133 amino acids of human PMS2.
Host	Mouse
Reactivity	Chimpanzee, Human, Mouse, Rat
Specificity	This is an protein A purified antibody directed against PMS2-134 and reacts with full length version o f PMS2 in human and hamster tissues. The epitope was putatively mapped to amino acids 58-81 of human PMS2.
Form	Liquid
Isotype	IgG1, kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Recommend Usage	ELISA (1:5000-1:20000) Western Blot (1:500-1:2000) The optimal working dilution should be determined by the end user.

Storage Buffer	In 20 mM KH_2PO_4, 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — PMS2

Entrez GeneID	5395
Protein Accession#	P54278;NP_000526
Gene Name	PMS2
Gene Alias	HNPCC4, PMS2CL, PMSL2
Gene Description	PMS2 postmeiotic segregation increased 2 (S. cerevisiae)
Omim ID	276300 600259 608623
Gene Ontology	Hyperlink
Gene Summary	This gene is one of the PMS2 gene family members found in clusters on chromosome 7. The pro duct of this gene is involved in DNA mismatch repair. It forms a heterodimer with MLH1 and this c omplex interacts with other complexes bound to mismatched bases. Mutations in this gene are as sociated with hereditary nonpolyposis colorectal cancer, Turcot syndrome, and are a cause of sup ratentorial primitive neuroectodermal tumors. Alternatively spliced transcript variants have been o bserved for this gene. [provided by RefSeq
Other Designations	DNA mismatch repair protein|H_DJ0042M02.9|PMS2 postmeiotic segregation increased 2|mis match repair endonuclease|postmeiotic segregation increased 2

Publication Reference

- Mismatch repair gene PMS2: disease-causing germline mutations are frequent in patients whose tumors stain negative for PMS2 protein, but paralogous genes obscure mutation detection and interpretation.

  Nakagawa H, Lockman JC, Frankel WL, Hampel H, Steenblock K, Burgart LJ, Thibodeau SN, de la Chapelle A.

  Cancer Research 2004 Jul; 64(14):4721.

  Application: IHC-P, WB-Ce, Human, Mouse , Human colon cancer, Human lymphoblastoid cells, Mouse-Human hybrid cells

- ATM-mediated stabilization of hMutL DNA mismatch repair proteins augments p53 activation during DNA damage.

  Luo Y, Lin FT, Lin WC.

  Molecular and Cellular Biology 2004 Jul; 24(14):6430.

  Application: WB, Human, H460, HCT-116, HEK 293, HFF cells, Human AT22IJE-T fibroblasts

- Microsatellite instability, immunohistochemistry, and additional PMS2 staining in suspected hereditary nonpolyposis colorectal cancer.

  de Jong AE, van Puijenbroek M, Hendriks Y, Tops C, Wijnen J, Ausems MG, Meijers-Heijboer H, Wagner A, van Os TA, Brocker-Vriends AH, Vasen HF, Morreau H.

  Clinical Cancer Research 2004 Feb; 10(3):972.

  Application: IHC-P, Human, Human ereditary nonpolyposis colorectal carcinoma

- Hereditary nonpolyposis colorectal cancer and related conditions.

  Lucci-Cordisco E, Zito I, Gensini F, Genuardi M.

  American Journal of Medical Genetics. Part A 2003 Nov; 122A(4):325.

Pathway

- Mismatch repair

Disease

- Adenocarcinoma
- Ataxia telangiectasia
- Breast cancer
- Colon cancer
- Colonic Neoplasms

- Colorectal Neoplasms
- Duodenal Neoplasms
- Endometrial Neoplasms
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- Ileal Neoplasms
- Jejunal Neoplasms
- Kidney Failure
- Lung Neoplasms
- Meningeal Neoplasms
- Meningioma
- Microsatellite Instability
- Neoplasm Invasiveness
- Neoplasm Recurrence
- Neoplasms
- Ovarian cancer
- Ovarian Neoplasms
- Prostatic Neoplasms
- Pulmonary Disease
- Thyroid Neoplasms
- Tobacco Use Disorder
- Urinary Bladder Neoplasms
- Werner syndrome