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MLH1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant MLH1.
Catalog # AT2879a

Product Information

Application	WB, IHC, IF, E
Primary Accession	P40692
Other Accession	BC006850
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	M1
Calculated MW	84601

Additional Information

Gene ID	4292
Other Names	DNA mismatch repair protein Mlh1, MutL protein homolog 1, MLH1, COCA2
Target/Specificity	MLH1 (AAH06850, 1 a.a. ~ 756 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MLH1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

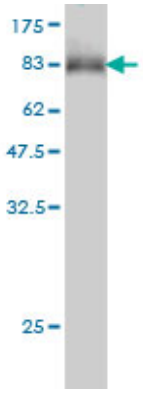
This gene was identified as a locus frequently mutated in hereditary nonpolyposis colon cancer (HNPCC). It is a human homolog of the E. coli DNA mismatch repair gene mutL, consistent with the characteristic alterations in microsatellite sequences (RER+phenotype) found in HNPCC. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described, but their full-length natures have not been determined.

References

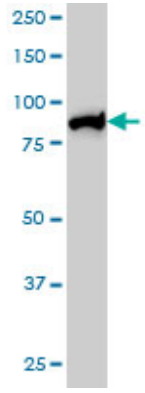
Association between Genetic Polymorphisms in the XRCC1, XRCC3, XPD, GSTM1, GSTT1, MSH2, MLH1, MSH3, and MGMT Genes and Radiosensitivity in Breast Cancer Patients. Mangoni M, et al. Int J Radiat Oncol Biol

Phys, 2010 Aug 11. PMID 20708344.A large-scale candidate gene approach identifies SNPs in SOD2 and IL13 as predictive markers of response to preoperative chemoradiation in rectal cancer. Ho-Pun-Cheung A, et al. Pharmacogenomics J, 2010 Jul 20. PMID 20644561.Lynch syndrome: the influence of environmental factors on extracolonic cancer risk in hMLH1 c.C1528T mutation carriers and their mutation-negative sisters. Blokhuis MM, et al. Fam Cancer, 2010 Sep. PMID 20640520.Risk of urothelial bladder cancer in Lynch syndrome is increased, in particular among MSH2 mutation carriers. van der Post RS, et al. J Med Genet, 2010 Jul. PMID 20591884.Comprehensive screen of genetic variation in DNA repair pathway genes and postmenopausal breast cancer risk. Monsees GM, et al. Breast Cancer Res Treat, 2010 May 23. PMID 20496165.

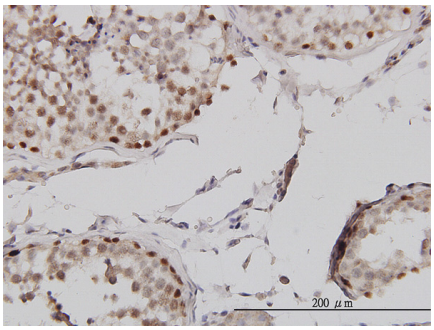
Images



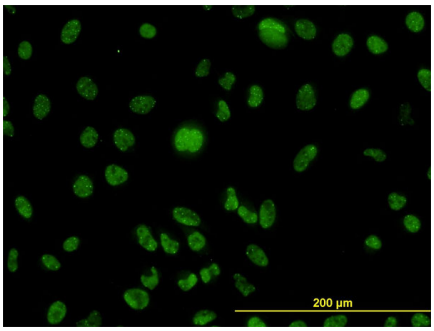
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (108.9 KDa) .



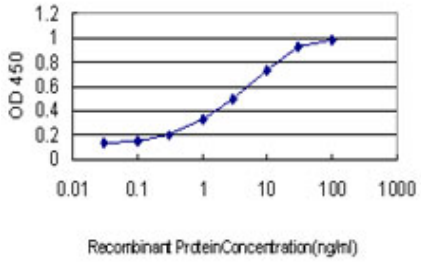
MLH1 monoclonal antibody (M02), clone M1 Western Blot analysis of MLH1 expression in Hela S3 NE ((Cat # AT2879a)



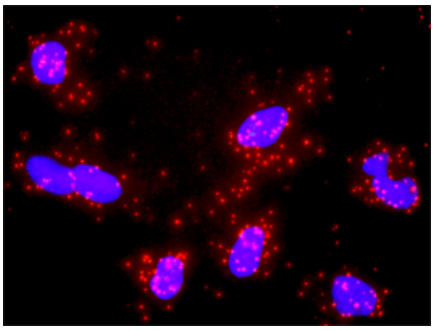
Immunoperoxidase of monoclonal antibody to MLH1 on formalin-fixed paraffin-embedded human testis. [antibody concentration 1 ug/ml]



Immunofluorescence of monoclonal antibody to MLH1 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged MLH1 is approximately 0.03ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between MSH2 and MLH1 HeLa cells were stained with anti-MSH2 rabbit purified polyclonal 1:1200 and anti-MLH1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.