

## MLH1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant MLH1.

Catalog # AT2879a

### Specification

---

#### MLH1 Antibody (monoclonal) (M02) - Product Information

Application	IF, WB, IHC, E
Primary Accession	<a href="#">P40692</a>
Other Accession	<a href="#">BC006850</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	84601

#### MLH1 Antibody (monoclonal) (M02) - 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

##### 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.

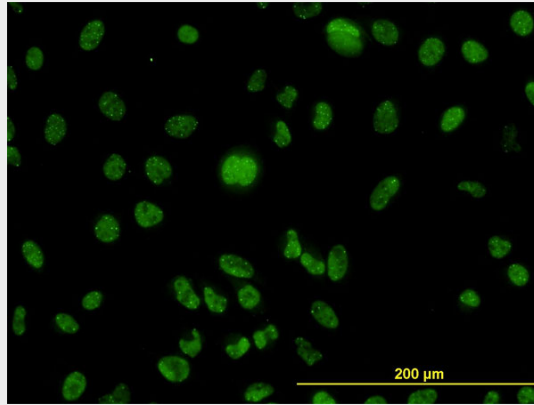
#### MLH1 Antibody (monoclonal) (M02) - Protocols

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

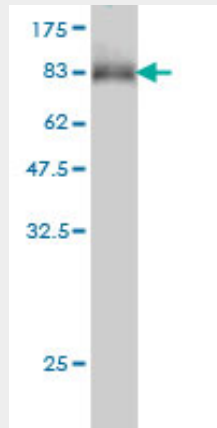
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

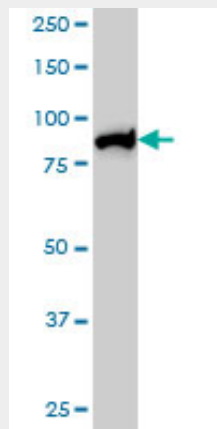
### MLH1 Antibody (monoclonal) (M02) - Images



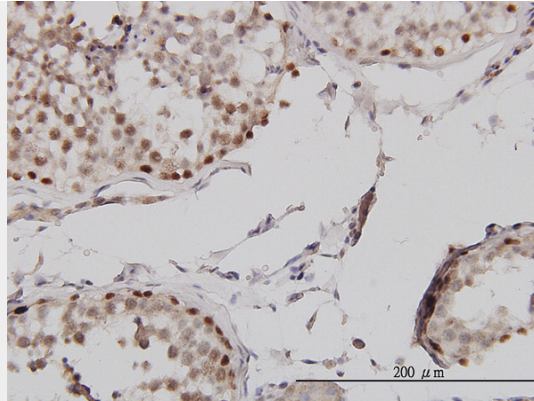
Immunofluorescence of monoclonal antibody to MLH1 on HeLa cell. [antibody concentration 10 ug/ml]



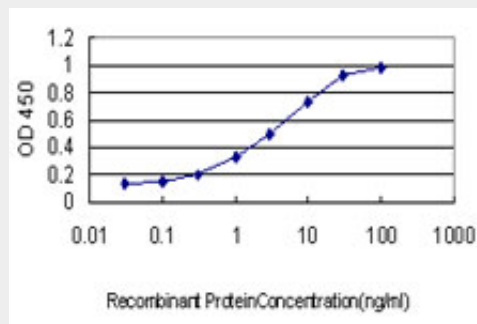
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (108.9 KDa) .



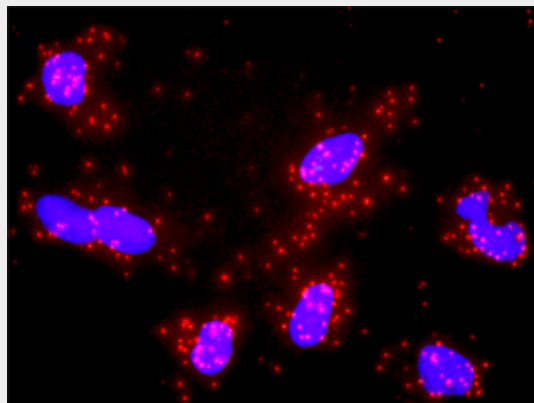
MLH1 monoclonal antibody (M02), clone M1 Western Blot analysis of MLH1 expression in HeLa S3 NE ( (Cat # AT2879a )



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



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).

### **MLH1 Antibody (monoclonal) (M02) - 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.

### **MLH1 Antibody (monoclonal) (M02) - 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.