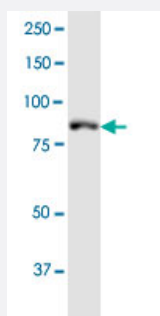


MLH1 monoclonal antibody (M02), clone M1

Catalog # H00004292-M02

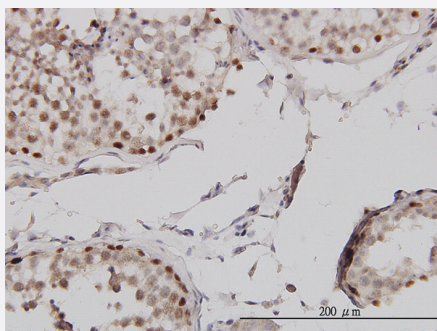
Size 100 ug

Applications



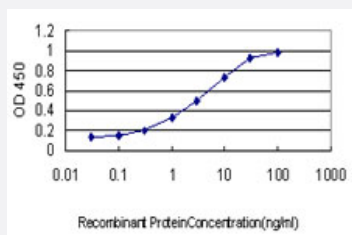
Western Blot (Cell lysate)

MLH1 monoclonal antibody (M02), clone M1. Western Blot analysis of MLH1 expression in K-562.



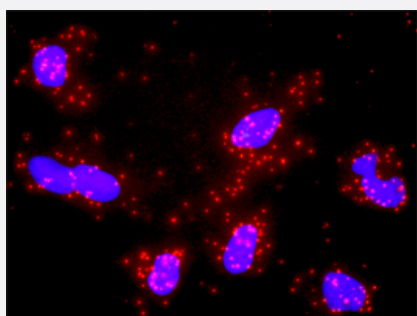
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



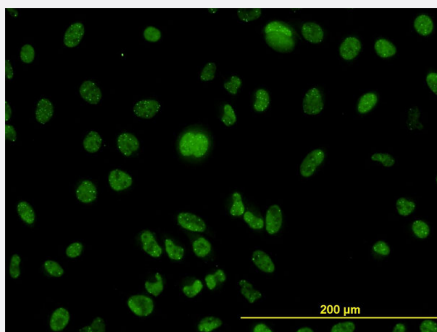
Sandwich ELISA (Recombinant protein)

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



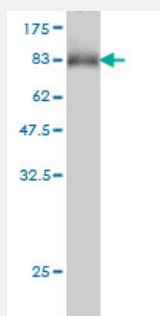
In situ Proximity Ligation Assay (Cell)

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).



Immunofluorescence

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



Western Blot detection against Immunogen (108.9 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant MLH1.
Immunogen	MLH1 (AAH06850, 1 a.a. ~ 756 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MSFVAGVIRRLDETVVNRIAAGEVIQRPANAIKEMIENCLDAKSTSIQVIVKEGGLKLIQDNGTGIRKEDLDIVCERFTTSKLQSFEDLASISTYGFRGEALASISHVAHVTTITKTADGKCAYRASYS DGK LK APPKPCAGNQGTQITVEDLFYNIATRRKALKNPSEEGKILEVVGRYSVHNAGISFSVKKQGETVADVRTLPNASTVDNIRSFIGNAVSRELIEIGCEDKTLAFKMNGYSNANYSVKKCIFLLFINHRLVESTSLRKAIVTVYAA YLPKNTHPFLYLSLEIS PQNV DVNVHPTKHEVHFLHEESILERVQQHIESKLLGSNSSRMYFTQTLLPGLAGPSGEMVKSTTSLTSSSTSGSSDKVYAHQMVRTDSREQKLDAFLQPLSKPLSSQPQAMTEDKTDISSGRARQQDEEMLELPAPAEVAAKNQSLEGDTTKGTSEMSEKRGPTSSNPRKRHREDS DVEMVEDDSRKEMTAACTPRRRIINLTSVLSLQEEINEQGHEVLREMLHNHSFVGCVNPQWALAQHQTKLYLLNTTKLSEELFYQILYDFANFGVLR LSEPAPLFDLAMLALDSPESGWT EEDGPKEGLAEYVEFLKKKAEM LADYFSLEIDEEGNLIGLPLLIDNYVPPLEGLPIFILRLATEVNWD EEKECFESLSKECAMFY SIRKQYSEESTLSGQQSEVP GSIPNSWKWTVEHVYKALRSHILPPKH FTEDGNILQLANLPDLYKVFERC
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (88)
Isotype	IgG2a Kappa

Quality Control Testing

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

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

MLH1 monoclonal antibody (M02), clone M1. Western Blot analysis of MLH1 expression in K-562.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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[Protocol Download](#)

- ELISA

- *In situ* Proximity Ligation Assay (Cell)

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- Immunofluorescence

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

Gene Info — MLH1

Entrez GeneID	4292
GeneBank Accession#	BC006850
Protein Accession#	AAH06850
Gene Name	MLH1
Gene Alias	COCA2, FCC2, HNPCC, HNPCC2, MGC5172, hMLH1
Gene Description	mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)
Omim ID	114030 120436 158320 276300 609310
Gene Ontology	Hyperlink
Gene Summary	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. Alternatively spliced transcript variants encoding different isoforms have been described, but their full-length natures have not been determined. [provided by RefSeq]
Other Designations	DNA mismatch repair protein Mlh1 MutL protein homolog 1

Publication Reference

- [Increased error-free DNA repair gene expression through reprogramming in human iPS cells.](#)

Yoshimura Y.

Regenerative Therapy 2019 Jun; 11:101.

Application: WB-Ce, Human, Human dermal fibroblasts

Pathway

- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [Mismatch repair](#)
- [Pathways in cancer](#)

Disease

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Anticipation](#)
- [Ataxia telangiectasia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Chromosomal Instability](#)
- [Chromosome Deletion](#)
- [Chronic Disease](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Cystadenocarcinoma](#)
- [Depressive Disorder](#)
- [Digestive System Neoplasms](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Duodenal Neoplasms](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Gastritis](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)

- [Genital Neoplasms](#)
- [Genomic Instability](#)
- [Helicobacter Infections](#)
- [Hemochromatosis](#)
- [Hepatitis B](#)
- [Hodgkin Disease](#)
- [Ileal Neoplasms](#)
- [Jejunal Neoplasms](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Lynch Syndrome II](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mental Disorders](#)
- [Microsatellite Instability](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)

- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pattern Recognition](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Psychometrics](#)
- [Pulmonary Disease](#)
- [Rare Diseases](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Retinal Diseases](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Stress](#)
- [Stress Disorders](#)
- [Thyroid Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Urologic Neoplasms](#)
- [Werner syndrome](#)