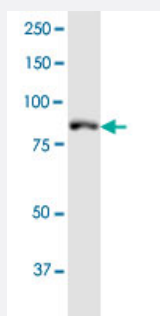


MLH1 monoclonal antibody (M02), clone M1

Catalog # H00004292-M02

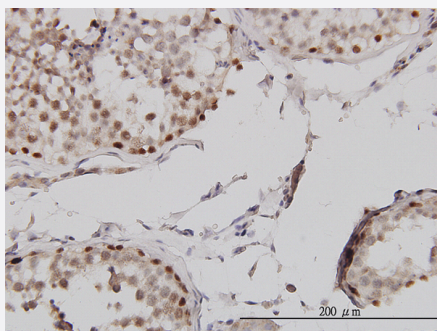
Size 100 ug

Applications



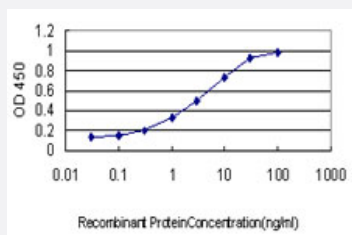
Western Blot (Cell lysate)

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



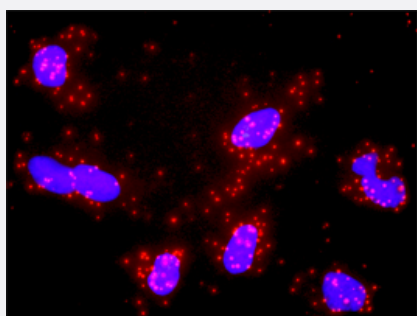
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



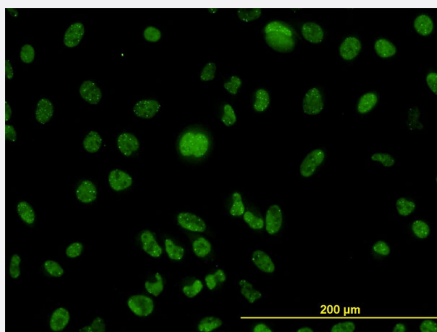
Sandwich ELISA (Recombinant protein)

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



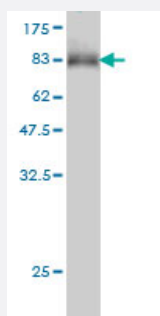
In situ Proximity Ligation Assay (Cell)

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	MSFVAGVIRRLDET VVNRIAAGEVIQRPANA KEMIENCLDAKSTSIQVIVKEGGLKLIQDNGTGIRKEDLDIVCERFTTSKLQSFEDLASISTYGFRGEALASISHVAHVTTITKTADGKCAYRASYS DGKLKAPPKPCAGNQGTQITVEDLFYNIATRRKALKNPSEEGKILEVVGRYSVHNAGISFSVKKQGETVADVRTLPNASTVDNIRSI FGNAVSRELIEIGCEDKTLAFKMNGYSNANYSVKKCIFLLFINHRLVESTSLRKA IETVYAA YLPKNTHPFLYLSLEISPQNVDVNVHPTKHEVHFLHEESILERVQQHIESKLLGSNSSRMYFTQTLLPGLAGPSGEMVKSTTSLTSSSTSGSSDKVYAHQMVRTDSREQKLDAFLQPLSKPLSSQPQAMTEDKTDISSGRARQQDEEMLELPAPAEVAAKNQSLEGDTTKGTSEMSEKRGPTSSNPRKRHREDSDVEMVEDDSRKEMTAACTPRRRIINLTSVLSLQEEINEQGHEVLREMLHNHSFVGCVNPQWALAQHQTKLYLLNTTKLSEELFYQILYDFANFGVLR LSEPAPLFDLAMLALDSPESGWT EEDGPKEGLAEYVEFLKKAEM LADYFSLEIDEEGNLIGLPLLIDNYVPPLEGLPIFILRLATEVNWDEEKECFESLSKECAMFY SIRQYISEESTLSGQQSEVPGSIPNSWKWTVEHVYKALRSHILPPKHFTEDGNILQLANLPDLYKVFERC
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](#)