

Product datasheet for **CF813718**

MLH1 Mouse Monoclonal Antibody [Clone ID: OTI4H4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4H4
Applications:	IHC
Recommended Dilution:	IHC 1:1000
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 339-558 of human MLH1 (NP_000240) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Shipped at -20°C or with ice packs, Upon delivery store at -20°C. Dilute in PBS(pH7.3) if necessary. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	84.6 kDa
Gene Name:	mutL homolog 1
Database Link:	NP_000240 Entrez Gene 17350 Mouse Entrez Gene 81685 Rat Entrez Gene 4292 Human P40692



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Background:

The protein encoded by this gene can heterodimerize with mismatch repair endonuclease PMS2 to form MutL alpha, part of the DNA mismatch repair system. When MutL alpha is bound by MutS beta and some accessory proteins, the PMS2 subunit of MutL alpha introduces a single-strand break near DNA mismatches, providing an entry point for exonuclease degradation. The encoded protein is also involved in DNA damage signaling and can heterodimerize with DNA mismatch repair protein MLH3 to form MutL gamma, which is involved in meiosis. This gene was identified as a locus frequently mutated in hereditary nonpolyposis colon cancer (HNPCC). [provided by RefSeq, Aug 2017]

Synonyms:

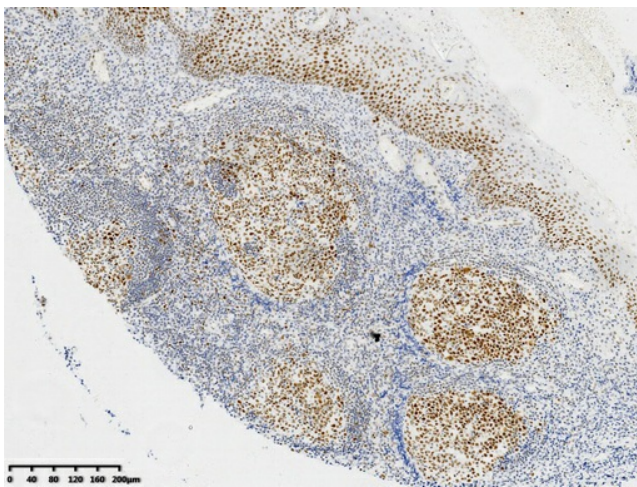
COCA2; FCC2; hMLH1; HNPCC; HNPCC2; MMRCS1

Protein Families:

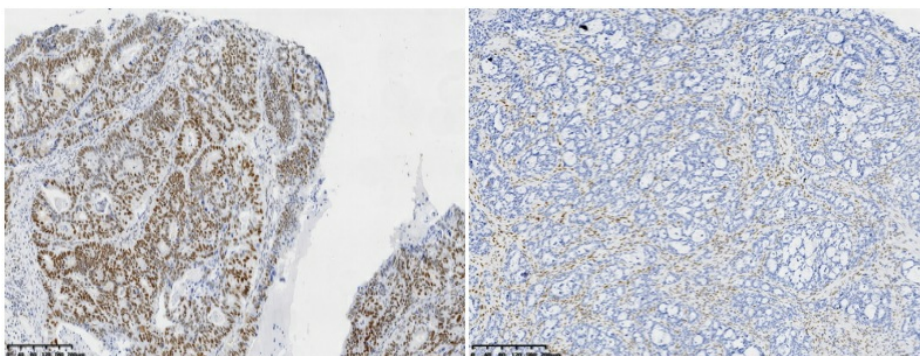
Druggable Genome

Protein Pathways:

Colorectal cancer, Endometrial cancer, Mismatch repair, Pathways in cancer

Product images:

Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-MLH1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH9.0) at 120°C for 3 min, [TA813718])



Immunohistochemical staining of paraffin-embedded Human Colon cancer tissues with expression (left) and loss (right) of MLH1 protein using anti-MLH1 mouse monoclonal antibody ([TA813718]). Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH9.0) at 120°C for 3 min.