

## MLH1 Polyclonal Antibody

Catalog number: 11697-1-AP

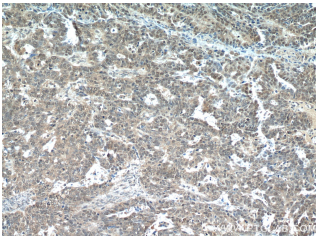
Size: 60 µg/150 µl

Source: Rabbit

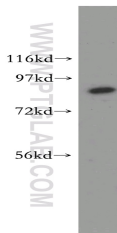
Isotype: IgG

Synonyms:

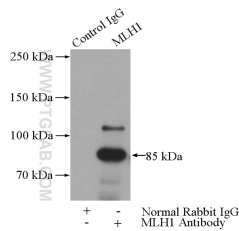
MLH1; COCA2, FCC2, hMLH1, HNPCC, HNPCC2, MLH1, MutL protein homolog 1



Immunohistochemical of paraffin-embedded human ovary tumor using 11697-1-AP (MLH1 antibody) at dilution of 1:50 (under 10x lens)



HEK-293 cells were subjected to SDS PAGE followed by western blot with 11697-1-AP (MLH1 antibody) at dilution of 1:500



IP Result of anti-MLH1 (IP:11697-1-AP, 3µg; Detection:11697-1-AP 1:500) with HeLa cells lysate 3200µg.

### Background

MLH1, also named as COCA2, belongs to the DNA mismatch repair mutL/hexB family. It heterodimerizes with PMS2 to form MutL alpha which is a component of the post-replicative DNA mismatch repair system (MMR). MutL alpha (MLH1-PMS2) interacts physically with the clamp loader subunits of DNA polymerase III, suggesting that it may play a role to recruit the DNA polymerase III to the site of the MMR. MLH1 also implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis in case of major DNA damages. MLH1 heterodimerizes with MLH3 to form MutL gamma which plays a role in meiosis. (PMID: 16873062, PMID: 18206974) Defects in MLH1 are the cause of hereditary non-polyposis colorectal cancer type 2 (HNPCC2). Defects in MLH1 are a cause of mismatch repair cancer syndrome (MMRCS). Defects in MLH1 are a cause of Muir-Torre syndrome (MTS). Defects in MLH1 are a cause of susceptibility to endometrial cancer. This antibody is specific to MLH1.

### Applications

Tested applications:	ELISA, WB, IHC, IP
Cited applications:	WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human
Calculated MLH1 MW:	756aa, 85 kDa
Observed MLH1 MW:	85 kDa
Positive WB detected in	HEK-293 cells, A431 cells, HeLa cells, human testis tissue, Jurkat cells
Positive IP detected in	HeLa cells
Positive IHC detected in	Human ovary tumor tissue
Recommended dilution:	WB: 1:500-1:5000 IP: 1:200-1:2000 IHC: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

Immunogen:	Ag2319
GenBank accession number:	BC006850
Gene ID (NCBI):	4292
Full name:	MutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)

### Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.