

MLH1 Polyclonal Antibody
Catalog # AP70963**Specification**

MLH1 Polyclonal Antibody - Product Information

Application	WB
Primary Accession	P40692
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

MLH1 Polyclonal Antibody - Additional Information**Gene ID** 4292**Other Names**

MLH1; COCA2; DNA mismatch repair protein Mlh1; MutL protein homolog 1

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

MLH1 Polyclonal Antibody - Protein Information**Name** MLH1**Synonyms** COCA2**Function**

Heterodimerizes with PMS2 to form MutL alpha, a component of the post-replicative DNA mismatch repair system (MMR). DNA repair is initiated by MutS alpha (MSH2-MSH6) or MutS beta (MSH2-MSH3) binding to a dsDNA mismatch, then MutL alpha is recruited to the heteroduplex. Assembly of the MutL-MutS-heteroduplex ternary complex in presence of RFC and PCNA is sufficient to activate endonuclease activity of PMS2. It introduces single-strand breaks near the mismatch and thus generates new entry points for the exonuclease EXO1 to degrade the strand containing the mismatch. DNA methylation would prevent cleavage and therefore assure that only the newly mutated DNA strand is going to be corrected. 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. Also implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis in case of major DNA damages. Heterodimerizes with MLH3 to form MutL gamma which plays a role in meiosis.

Cellular Location

Nucleus. Chromosome Note=Recruited to chromatin in a MCM9-dependent manner

Tissue Location

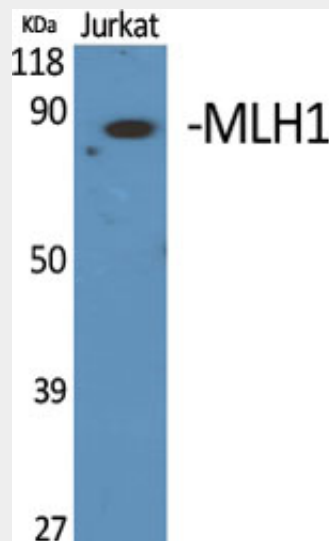
Colon, lymphocytes, breast, lung, spleen, testis, prostate, thyroid, gall bladder and heart

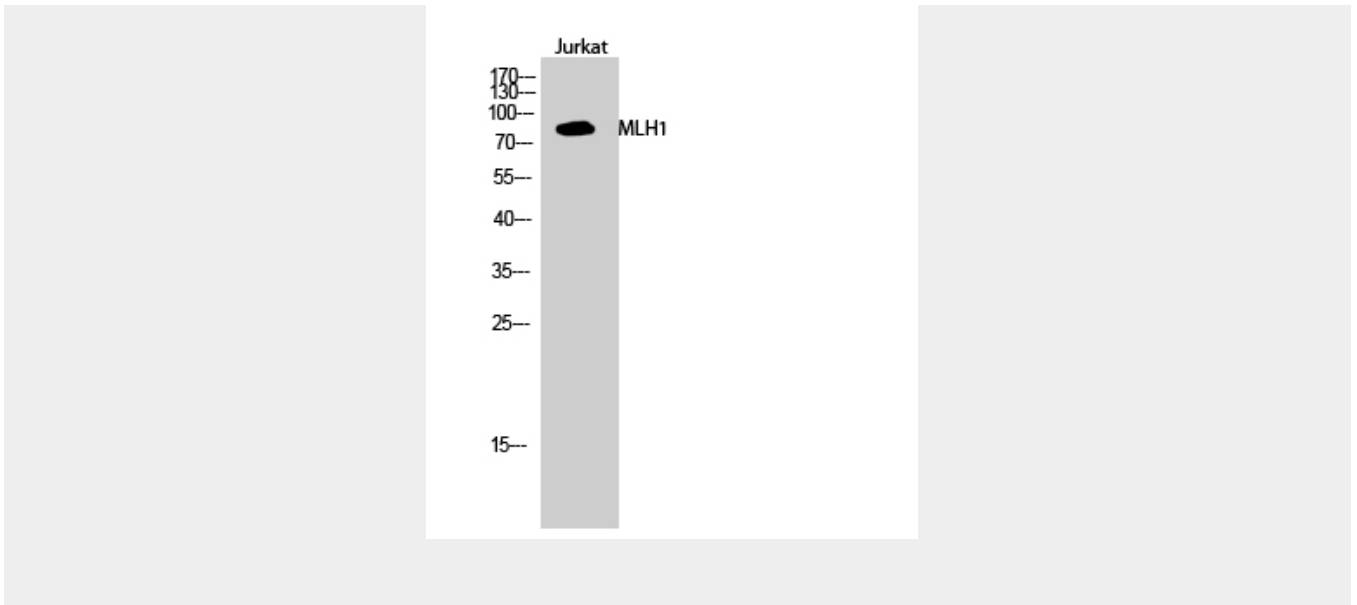
MLH1 Polyclonal Antibody - Protocols

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 Polyclonal Antibody - Images





MLH1 Polyclonal Antibody - Background

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