MLH1 Monoclonal Antibody

Product Code	CSB-MA924525
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Immunogen	Purified recombinant Human MLH1 protein fragments expressed in E.coli.
Raised In	Mouse
Species Reactivity	Human
Specificity	This antibody detects endogenous levels of MLH1 and does not cross-react with related proteins.
Tested Applications	ELISA,WB;Recommended dilution:WB:1:500-1:5000
Relevance	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-MSH6) 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.
Form	Purified mouse monoclonal in PBS(pH 7.4) containing with 0.02% sodium azide,0.1mg/mlBSA and 50% glycerol.
Purification Method	Affinity purified
Isotype	IgG2b
Clonality	Monoclonal
Alias	COCA 2; COCA2; DNA mismatch repair protein Mlh1; FCC 2; FCC2; hMLH 1; hMLH1; HNPCC 2; HNPCC; HNPCC2; MGC5172; MLH 1; MLH1; MLH1_HUMAN; MutL homolog 1 (E. coli); MutL homolog 1; MutL homolog 1 colon cancer nonpolyposis type 2;
Product Type	Monoclonal Antibody
Immunogen Species	Homo sapiens (Human)
Clone No.	29F9
Usage	For Research Use Only. Not for use in diagnostic or therapeutic procedures.