

MLH1 Monoclonal Antibody

Catalog No: #27214

Package Size: #27214-1 50ul #27214-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

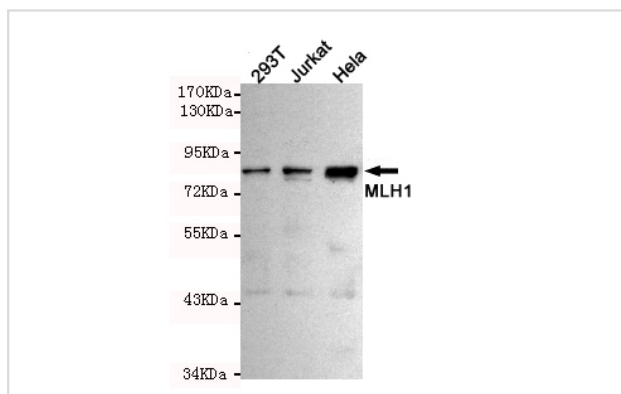
Description

Product Name	MLH1 Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	2B3-H6-C11
Isotype	IgG2b
Purification	Affinity purified
Applications	WB
Species Reactivity	Hu
Specificity	This antibody detects endogenous levels of MLH1 and does not cross-react with related proteins.
Immunogen Type	Recombinant Protein
Immunogen Description	Purified recombinant human MLH1 protein fragments expressed in E.coli.
Target Name	MLH1
Other Names	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;
Accession No.	Uniprot: P40692 Gene ID: 4292
SDS-PAGE MW	85kd
Formulation	Purified mouse monoclonal in PBS(pH 7.4) containing with 0.02% sodium azide,0.1mg/mlBSA and 50% glycerol.
Storage	store at -20 Λ C

Application Details

Western blotting: 1:500

Images



Western blot detection of MLH1 antibody in HeLa,293T and Jurkat cell lysates using MLH1 antibody (1:500 diluted).Predicted band size:85KDa.Observed band size:85KDa.

Background

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.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.