

36-2776: Anti-MLH1 (MutL Homolog 1) Monoclonal Antibody(Clone: MLH1/1324)

Clonality :	Monoclonal
Clone Name :	MLH1/1324
Application :	ELISA
Reactivity :	Human
Gene :	MLH1
Gene ID :	4292
Uniprot ID :	P40692
Alternative Name :	COCA2; DNA mismatch repair protein Mlh1; FCC2; hMLH1; MutL homolog 1 (E. coli); MutL homolog 1 (MLH1); MutL homolog 1 colon cancer nonpolyposis type 2 (HNPCC2); MutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli); MutL protein homolog 1; MutL, E. coli, homolog of, 1
Isotype :	Mouse IgG2b, kappa
Immunogen Information :	Recombinant human MLH1 protein

Description

This MAbs recognizes a protein of 83kDa, identified as MLH1. Defects in MLH1 are the cause of hereditary non-polyposis colorectal cancer type 2 (HNPCC2). 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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA);

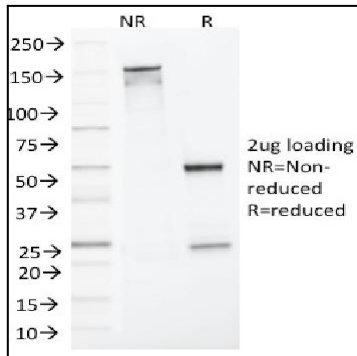


Fig. 1: SDS-PAGE Analysis Purified MLH1 Mouse Monoclonal Antibody (MLH1/1324). Confirmation of Integrity and Purity of Antibody