Anti-MLH1 Antibody

RE6039

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, ICC, IHC-P, FC, IP
Molecular Wt:	85 kDa

Description: MLH1 is a DNA mismatch repair protein that 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, and then MutL alpha is recruited to the heteroduplex. Assembly of the MutL-MutS-heteroduplex ternary complex in the 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 mismatch strand. MutL alpha (MLH1-PMS2) interacts physically with the clamp loader subunits of DNA polymerase III, suggesting that it may recruit DNA polymerase III to the site of the MMR. Defects in MLH1 are the cause of hereditary nonpolyposis colorectal cancer type 2 (HNPCC2). Most patients with HNPCC have mutations in either the MLH1 or MSH2 genes (1).

Immunogen: peptide

Positive control: Hela, 293, A431, SW480.

Subcellular location: Nucleus

Database links: SwissProt: P40692 Human

Recommended Dilutions:

WB	1:1,000
IP	1:10-100
FC	1:10-100

Storage Buffer: 1*TBS (pH7.4), 0.5% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at -20 ℃. Stable for 12 months from date of receipt

Purity: Tissue culture supernatant

Images

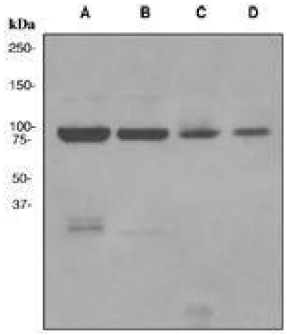

Fig1: Western blot analysis on (A) 293, (B) HeLa, (C) A431, and (D) SW480 cell lysates using anti-MLH1.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. The UniProt Consortium, The Universal Protein Resource (UniProt), Nucleic Acids Res. 37:D169-D174(2009).
2. Bellacosa A. J Cell Physiol. 187(2):137-44, 2001.
3. Argueso JL et al. Mol Cell Biol. 23(3):873-86, 2003.