

MLH1 Monoclonal antibody

Catalog Number: 67350-1-Ig

Featured Product

Basic Information

Catalog Number:

67350-1-Ig

Size:

2100 µg/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG27723

GenBank Accession Number:

BC006850

GeneID (NCBI):

4292

UNIPROT ID:

P40692

Full Name:

mutL homolog 1, colon cancer,
nonpolyposis type 2 (E. coli)

Calculated MW:

756 aa, 85 kDa

Observed MW:

85-100 kDa, 40-45 kDa

Purification Method:

Protein A purification

CloneNo.:

2F12C4

Recommended Dilutions:

WB 1:5000-1:50000

Applications

Tested Applications:

WB, ELISA

Species Specificity:

Human, rat

Positive Controls:

WB: A431 cells, HeLa cells, Caco-2 cells, COLO 320
cells, HEK-293 cells, Jurkat cells

Background Information

MLH1, also named as COCA2, belongs to the DNA mismatch repair mutL/hexB family. It heterodimerizes with PMS2 to form MutL alpha which is a component of the post-replicative DNA mismatch repair system (MMR). 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. MLH1 also implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis in case of major DNA damages. MLH1 heterodimerizes with MLH3 to form MutL gamma which plays a role in meiosis. (PMID: 16873062, PMID: 18206974) Defects in MLH1 are the cause of hereditary non-polyposis colorectal cancer type 2 (HNPCC2). Defects in MLH1 are a cause of mismatch repair cancer syndrome (MMRCS). Defects in MLH1 are a cause of Muir-Torre syndrome (MTS). Defects in MLH1 are a cause of susceptibility to endometrial cancer. Western blot analysis with an MLH1 antibody detected a 85-100 kDa band. Full-length human MLH1 is specifically cleaved into degradation products of 40-45 kDa by caspase-3 (PMID: 15087450, PMID: 19603033). This antibody is specific to MLH1.

Storage

Storage:

Store at -20°C.

Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

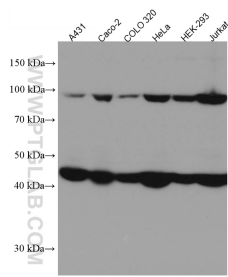
For technical support and original validation data for this product please contact:

T: 4006900926

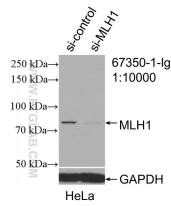
E: Proteintech-CN@ptglab.comW: ptgcn.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67350-1-Ig (MLH1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



WB result of MLH1 antibody (67350-1-Ig: 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MLH1 transfected HeLa cells.