

For Research Use Only

MLH1 Polyclonal antibody

Catalog Number: 11697-1-AP

Featured Product

23 Publications



Basic Information

Catalog Number: 11697-1-AP	GenBank Accession Number: BC006850	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 700 µg/ml by Nanodrop and 453 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 4292	Recommended Dilutions: WB 1:500-1:1000 IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB IF 1:50-1:500
Source: Rabbit	Full Name: mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)	
Isotype: IgG	Calculated MW: 756 aa, 85 kDa	
Immunogen Catalog Number: AG2319	Observed MW: 85 kDa	

Applications

Tested Applications: IF, IP, WB, ELISA	Positive Controls: WB : A431 cells, HEK-293 cells, HeLa cells, Jurkat cells, human testis tissue IP : HeLa cells, IF : HeLa cells,
Cited Applications: CoIP, IF, IHC, WB	
Species Specificity: human, mouse, rat	
Cited Species: human, mouse, zebrafish	

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Xuting Ran	35664732	Front Oncol	IHC
Jun Zhu	32396667	J Surg Oncol	IHC
Dazhang Bai	33949657	Hum Mol Genet	WB

Storage

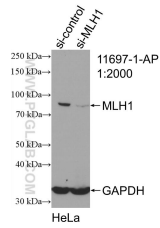
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

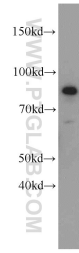
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

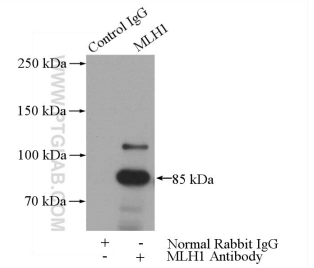
Selected Validation Data



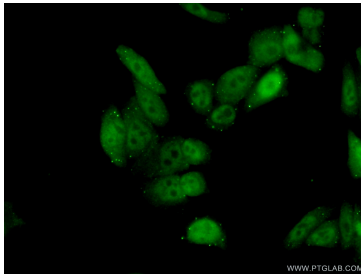
WB result of MLH1 antibody (11697-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MLH1 transfected HeLa cells.



A431 cells were subjected to SDS PAGE followed by western blot with 11697-1-AP (MLH1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



IP Result of anti-MLH1 (IP:11697-1-AP, 3ug; Detection:11697-1-AP 1:500) with HeLa cells lysate 3200ug.



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 11697-1-AP (MLH1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).