

For Research Use Only

MLH1 Recombinant antibody, PBS Only (Capture)

Catalog Number: 84208-2-PBS



Basic Information

Catalog Number: 84208-2-PBS	GenBank Accession Number: BC006850	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 4292	CloneNo.: 241472D1
Source: Rabbit	UNIPROT ID: P40692	
Isotype: IgG	Full Name: mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)	
Immunogen Catalog Number: AG2319	Calculated MW: 756 aa, 85 kDa	
	Observed MW: 85-100 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, Cytometric bead array, Indirect ELISA

Species Specificity:
human

Product Information

84208-2-PBS targets MLH1 as part of a matched antibody pair:

MP01140-1: 84208-2-PBS capture and 84208-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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.

Storage

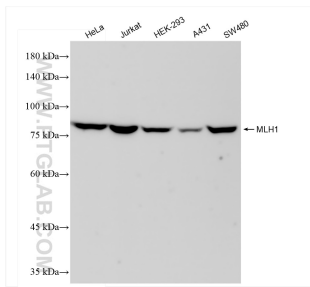
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

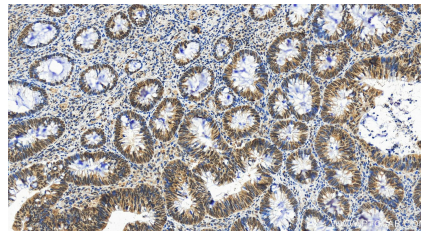
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

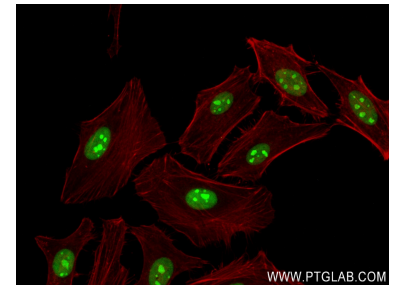
Selected Validation Data



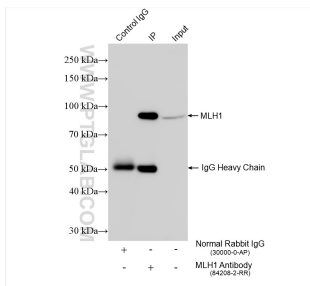
Various lysates were subjected to SDS PAGE followed by western blot with 84208-2-RR (MLH1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84208-2-PBS in a different storage buffer formulation.



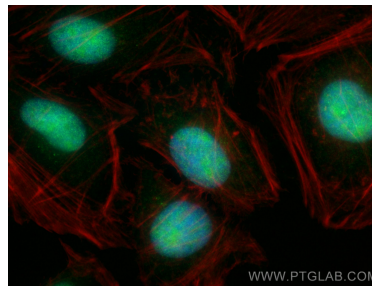
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84208-2-RR (MLH1 antibody) at dilution of 1:250 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84208-2-PBS in a different storage buffer formulation.



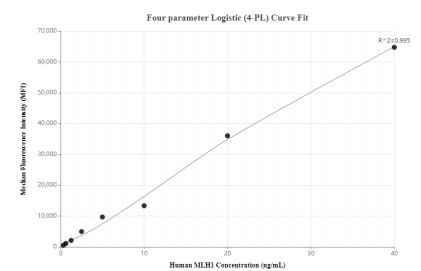
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MLH1 antibody (84208-2-RR, Clone: 241472D1) at dilution of 1:300 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84208-2-PBS in a different storage buffer formulation.



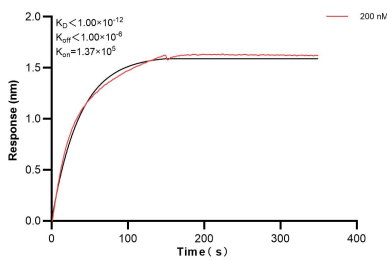
IP result of anti-MLH1 (IP:84208-2-RR, 4ug; Detection:84208-2-RR 1:1000) with HeLa cells lysate 1200 ug. This data was developed using the same antibody clone with 84208-2-PBS in a different storage buffer formulation.



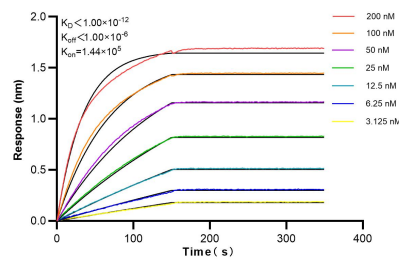
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MLH1 antibody (84208-2-RR, Clone: 241472D1) at dilution of 1:300 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 84208-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01140-1, MLH1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84208-2-PBS. Detection antibody: 84208-1-PBS. Standard: Ag2319. Range: 0.313-40 ng/mL.



Biolayer interferometry (BLI) kinetic assay of 84208-2-PBS against Human MLH1 was performed. The affinity constant is below 1 pM.



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