

For Research Use Only

CoraLite® Plus 488-conjugated MLH1 Monoclonal antibody



Catalog Number: CL488-67350

Featured Product

Basic Information

Catalog Number: CL488-67350	GenBank Accession Number: BC006850	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 4292	CloneNo.: 2F12C4
Source: Mouse	Full Name: mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli)	Excitation/Emission maxima wavelengths: 488 nm / 515 nm
Isotype: IgG2a	Calculated MW: 756 aa, 85 kDa	
Immunogen Catalog Number: AG27723	Observed MW: 85-100 kDa, 40-45 kDa	

Applications

Tested Applications:
FC (Intra)

Species Specificity:
Human, rat

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

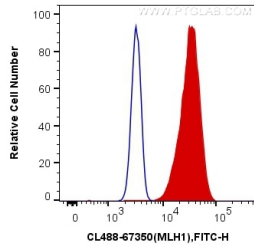
Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 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



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human MLH1 (CL488-67350, Clone:2F12C4) (red), or 0.4 ug Mouse IgG2a Isotype Control (CL488-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).