

MLH1 Antibody HRP Conjugated

Catalog No: #C00467H

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Description

Product Name	MLH1 Antibody HRP Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	IHC-P IHC-F
Species Reactivity	Hu Ms Rt
Immunogen Description	KLH conjugated synthetic peptide aa 520-570 756 derived from human MLH1
Conjugates	HRP
Target Name	MLH1
Other Names	FCC2; COCA2; HNPCC; hMLH1; HNPCC2; DNA mismatch repair protein Mlh1; MutL protein homolog 1; MLH1
Accession No.	Swiss-Prot#P40692NCBI Gene ID4292
Uniprot	P40692
GeneID	4292;
Excitation Emission	N A
Cell Localization	Nucleus
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Application Details

IHC-P=1:50-200 IHC-F=1:50-200

Background

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, then MutL alpha is recruited to the heteroduplex. Assembly of the MutL-MutS-heteroduplex ternary complex in 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 strand containing the mismatch. DNA methylation would prevent cleavage and therefore assure that only the newly mutated DNA strand is going to be corrected. 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. Also implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis in case of major DNA damages. Heterodimerizes with MLH3 to form MutL gamma which plays a role in meiosis.

Note: This product is for in vitro research use only