

Product Name: MLH3 Rabbit Polyclonal Antibody**Catalog #: APRab13948**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight	164kDa

Antigen Information

Gene Name	MLH3
Alternative Names	MLH3; DNA mismatch repair protein Mlh3; MutL protein homolog 3
Gene ID	27030.0
SwissProt ID	Q9UHC1
Immunogen	The antiserum was produced against synthesized peptide derived from human MLH3. AA range:521-570

Background

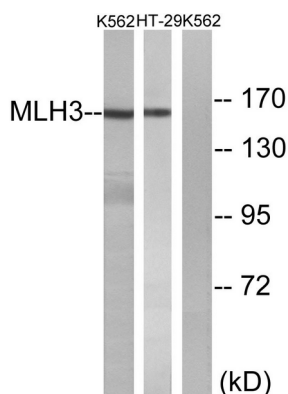
This gene is a member of the MutL-homolog (MLH) family of DNA mismatch repair (MMR) genes. MLH genes are implicated in

maintaining genomic integrity during DNA replication and after meiotic recombination. The protein encoded by this gene functions as a heterodimer with other family members. Somatic mutations in this gene frequently occur in tumors exhibiting microsatellite instability, and germline mutations have been linked to hereditary nonpolyposis colorectal cancer type 7 (HNPCC7). Several alternatively spliced transcript variants have been identified, but the full-length nature of only two transcript variants has been determined. [provided by RefSeq, Jul 2008],disease:Defects in MLH3 are a cause of somatic colorectal cancer (CRC) [MIM:114500],disease:Defects in MLH3 are the cause of hereditary non-polyposis colorectal cancer type 7 (HNPCC7) [MIM:604395]. Mutations in more than one gene locus can be involved alone or in combination in the production of the HNPCC phenotype (also called Lynch syndrome). Most families with clinically recognized HNPCC have mutations in either MLH1 or MSH2 genes. HNPCC is an autosomal, dominantly inherited disease associated with marked increase in cancer susceptibility. It is characterized by a familial predisposition to early onset colorectal carcinoma (CRC) and extra-colonic cancers of the gastrointestinal, urological and female reproductive tracts. HNPCC is reported to be the most common form of inherited colorectal cancer in the Western world, and accounts for 15% of all colon cancers. Cancers in HNPCC originate within benign neoplastic polyps termed adenomas. Clinically, HNPCC is often divided into two subgroups. Type I: hereditary predisposition to colorectal cancer, a young age of onset, and carcinoma observed in the proximal colon. Type II: patients have an increased risk for cancers in certain tissues such as the uterus, ovary, breast, stomach, small intestine, skin, and larynx in addition to the colon. Diagnosis of classical HNPCC is based on the Amsterdam criteria: 3 or more relatives affected by colorectal cancer, one a first degree relative of the other two; 2 or more generation affected; 1 or more colorectal cancers presenting before 50 years of age; exclusion of hereditary polyposis syndromes. The term "suspected HNPCC" or "incomplete HNPCC" can be used to describe families who do not or only partially fulfill the Amsterdam criteria, but in whom a genetic basis for colon cancer is strongly suspected.,function:Probably involved in the repair of mismatches in DNA.,sequence caution:Contaminating sequence. Sequence of unknown origin in the N-terminal part.,similarity:Belongs to the DNA mismatch repair mutL/hexB family.,subunit:Heterodimer of MLH1 and MLH3.,tissue specificity:Ubiquitous.,

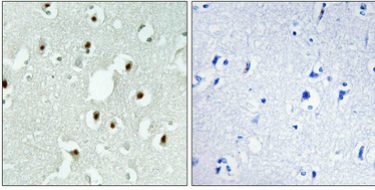
Research Area

Mismatch repair;

Image Data



Western blot analysis of lysates from K562 and HT-29 cells, using MLH3 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.