



Mouse Anti-Human MLH1 monoclonal antibody, clone JID520 (CABT-L2802)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
Specificity	Human MLH1
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	JID520
Conjugate	Unconjugated
Applications	IHC
Reconstitution	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
Positive Control	Colon, Colon Carcinoma
Format	Liquid
Size	Predilute: 7 ml, Concentrate: 100 µl, Concentrate: 1 ml
Buffer	Predilute: Antibody Diluent Buffer Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA

Preservative	< 0.1% Sodium Azide
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	MutL Homolog 1 (MLH1) is a protein involved in the mismatch-repair pathway. This protein is commonly associated with hereditary non-polyposis colorectal cancer, as the MLH1 gene is frequently mutated in patients with this cancer. Studies have shown MLH1 to be deficient in a high percentage of patients with microsatellite instability, as well as endometrial and ovarian cancers. Use of Anti-MLH1 is optimized when paired in an IHC panel with MSH6, MSH2, and PMS2. Anti-MLH1 is useful in the detection of MLH1 in a number of normal and neoplastic tissues, and for identifying a loss of MLH1 in tumors that are microsatellite-unstable.
Keywords	MLH1;mutL homolog 1;FCC2;COCA2;HNPCC;hMLH1;HNPCC2;DNA mismatch repair protein Mlh1;mutL homolog 1, colon cancer, nonpolyposis type 2;

GENE INFORMATION

Gene Name	MLH1 mutL homolog 1 [Homo sapiens (human)]
Official Symbol	MLH1
Synonyms	MLH1; mutL homolog 1; FCC2; COCA2; HNPCC; hMLH1; HNPCC2; DNA mismatch repair protein Mlh1; mutL homolog 1, colon cancer, nonpolyposis type 2;
Entrez Gene ID	4292
Protein Refseq	NP_000240
UniProt ID	P40692
Chromosome Location	3p21.3
Pathway	BRCA1-associated genome surveillance complex (BASC); Cell Cycle; Colorectal cancer; DNA Repair; Direct p53 effectors; Endometrial cancer; Fanconi anemia pathway; Meiosis;
Function	ATP binding; ATPase activity; contributes_to MutSalph complex binding; guanine/thymine mispair binding; protein binding; contributes_to protein binding; contributes_to single-stranded DNA binding;