



Rabbit Anti-MLH1 monoclonal antibody, clone TQ09-15 (CABT-L604)

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

PRODUCT INFORMATION

Target	MLH1
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	TQ09-15
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC, IP, FC
Molecular Weight	85 kDa
Cellular Localization	Nucleus.
Positive Control	A431, HepG2, human tonsil tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide

Storage

Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction

DNA-mismatch repair (MMR) is an essential process in maintaining genetic stability. Lack of a functional DNA-mismatch repair pathway is a common characteristic of several different types of human cancers, either due to an MMR gene mutation or promoter methylation gene silencing. MLH1 is an integral part of the protein complex responsible for mismatch repair and is expressed in lymphocytes, heart, colon, breast, lung, spleen, testis, prostate, thyroid and gall bladder tissues, and is methylated in several ovarian tumors. Loss of MLH1 protein expression is associated with a mutated phenotype, microsatellite instability and a predisposition to cancer. In hereditary nonpolyposis colorectal cancer (HNPCC), an autosomal dominant inherited cancer syndrome that signifies a high risk of colorectal and various other types of cancer, the MLH1 gene exhibits a pathogenic mutation. Certain cancer cell lines, including leukemia CCRF-CEM, colon HCT 116 and KM12, and ovarian cancers SK-OV-3 and IGROV-1, show complete deficiency of MLH1, while MLH1 is expressed in 60% of melanomas, 70% of noninvasive squamous cell carcinomas and 30% of invasive squamous cell carcinomas.

Keywords

COCA 2;COCA2;DNA mismatch repair protein Mlh1;FCC 2;FCC2;hMLH 1;hMLH1;HNPCC 2;HNPCC;HNPCC2;MGC5172;MLH 1;MLH1;MLH1_HUMAN;MutL homolog 1 (E. coli);MutL homolog 1;MutL homolog 1 colon cancer nonpolyposis type 2;MutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli);MutL protein homolog 1;MutL, E. coli, homolog of, 1 antibody
