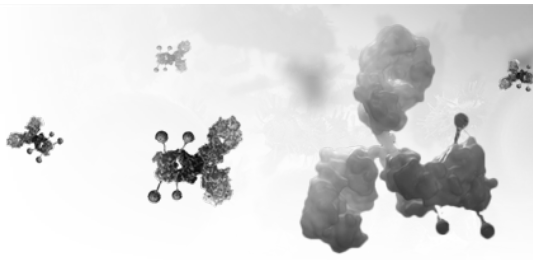

Rabbit Anti-Human PMS2 Monoclonal Antibody, clone CQ7227 (CABT-Z273R)

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

PRODUCT INFORMATION

Immunogen	Synthetic peptide corresponding to residues within aa1-100 of PMS2 was used as an immunogen.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	CQ7227
Purification	ProA affinity purified IgG.
Conjugate	Unconjugated
Applications	IHC-P Recommended concentration: IHC-P: 1:100-1:200
Molecular Weight	96 kDa
Cellular Localization	Nucleus
Positive Control	Esophagus
Format	Liquid
Concentration	Lot specific
Size	100 µl

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Buffer	PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.
Preservative	0.01% Sodium azide
Storage	Store at -20 °C. Avoid freeze/thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction	Mismatch repair (MMR) proteins is a group of nuclear enzymes, which in all proliferating cells participate in repair of base-base mismatch, that occur during DNA replication. Loss of MMR proteins leads to an accumulation of DNA replication errors in the proliferating cells, particularly in areas of the genome with short repetitive nucleotide sequences, a phenomenon known as microsatellite instability (MSI). The PMS2 protein forms a heterodimer with the MLH1 protein which is then activated in the presence of ATP; this complex coordinates the binding of other proteins that repair DNA errors arising during cell preparation for cell division. The loss of PMS2 expression in tumors can be helpful in identifying hMLH1 mutation carriers and identifies their suitability for mutation analysis. PMS2 gene defects account for a small but significant proportion of colorectal cancers and for a substantial proportion of tumors with microsatellite instability. Compared to molecular biological techniques, immunohistochemical analysis of MMR protein expression is much simpler and cheaper. Immunohistochemical analysis helps to pinpoint the affected gene and should be readily accessible in a pathology laboratory.
Keywords	PMS2; PMS2 postmeiotic segregation increased 2 (S. cerevisiae); PMSL2, postmeiotic segregation increased (S. cerevisiae) 2; mismatch repair endonuclease PMS2; H_DJ0042M02.9; HNPCC4; PMS1 protein homolog 2; DNA mismatch repair protein PMS2; PMSL2; PMS2CL

GENE INFORMATION

Gene Name	PMS2
Entrez Gene ID	5395
UniProt ID	P54278

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