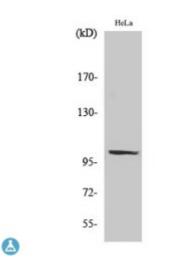


Anti-PMS2 antibody



Description Rabbit polyclonal to PMS2.

Model STJ95169

Host Rabbit

Reactivity Human

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human PMS2

Immunogen Region 430-510 aa, Internal

Gene ID <u>107984056</u>

Gene Symbol PMS2

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000

Specificity PMS2 Polyclonal Antibody detects endogenous levels of PMS2 protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Mismatch repair endonuclease PMS2 DNA mismatch repair protein PMS2

PMS1 protein homolog 2

Molecular Weight 85 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:9122OMIM:276300</u>

Alternative Names Mismatch repair endonuclease PMS2 DNA mismatch repair protein PMS2

PMS1 protein homolog 2

Function Component of the post-replicative DNA mismatch repair system (MMR).

Heterodimerizes with MLH1 to form MutL alpha. 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.

Cellular Localization Nucleus

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com