

Rabbit anti-Human PMS2 Polyclonal Antibody | anti-PMS2 antibody

PMS2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA324312	Rabbit	Human	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

PMS2; Polyclonal Antibody; PMS2 Antibody; DNA mismatch repair gene homologue; DNA mismatch repair protein PMS2; H_DJ0042M02.9; HNPCC4; Mismatch repair endonuclease PMS2; Mismatch repair gene PMSL2; MLH4; PMS 2; PMS1 homolog 2 mismatch repair system; PMS1 protein homolog 2; PMS2 postmeiotic segregation increased 2; PMS2 postmeiotic segregation increased 2 (S. cerevisiae); PMS2_HUMAN; PMS2CL; PMSL2; Postmeiotic segregation increased; S. cerevisiae; 2; anti-PMS2 antibody

PRODUCT SPECIFICATIONS

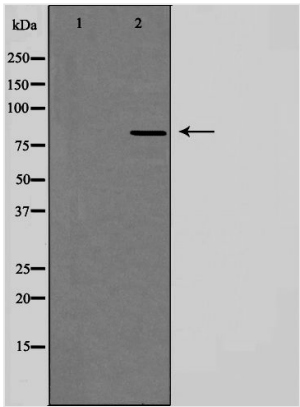
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Specificity	PMS2 antibody detects endogenous levels of total PMS2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	862
Applicable Applications for anti-PMS2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus.
Predicted Cross Reactivity	Pig, Zebrafish, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (100%), Zebrafish (82%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (91%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA324312 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from HeLa cells, using PMS2 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PMS2 antibody

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.

Subunit Structure: Heterodimer of PMS2 and MLH1 (MutL alpha). Forms a ternary complex with MutS alpha (MSH2-MSH6) or MutS beta (MSH2-MSH3). Part of the BRCA1-associated genome surveillance complex (BASC), which contains BRCA1, MSH2, MSH6, MLH1, ATM, BLM, PMS2 and the RAD50-MRE11-NBS1 protein complex. This association could be a dynamic process changing throughout the cell cycle and within subnuclear domains. Interacts with MTMR15/FAN1.

Similarity: Belongs to the DNA mismatch repair MutL/HexB family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1015181836
NCBI GeneID	5395
NCBI Accession #	NP_000526.2
NCBI GenBank Nucleotide #	NM_000535.6
UniProt Accession #	P54278; Q52LH6; Q5FBW9; Q5FBX1; Q5FBX2; Q75MR2; B2R610
Molecular Weight	Observed: 85 kD Predicted: 96 kDa
NCBI Official Full Name	mismatch repair endonuclease PMS2 isoform a
NCBI Official Synonym Full Names	PMS1 homolog 2, mismatch repair system component
NCBI Official Symbol	PMS2
NCBI Official Synonym Symbols	MLH4; PMSL2; HNPCC4; PMS2CL
NCBI Protein Information	mismatch repair endonuclease PMS2
UniProt Protein Name	Mismatch repair endonuclease PMS2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/pms2-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/324312>