

Immunotag™ PMS2 Antibody

Antibody Specification	
Catalog No.	ITA3332
Product Description	Immunotag™ PMS2 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PMS2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IF/ICC,ELISA
Recommended Dilution	WB 1:500-1:2000, IF/ICC 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	A synthesized peptide
Specificity	PMS2 antibody detects endogenous levels of total PMS2
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Gene Name	PMS2
Accession No.	P54278
Alternate Names	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; PMS2 postmeiotic segregation increased 2; PMS2 postmeiotic segregation increased 2 (S. cerevisiae); PMS2_HUMAN; PMS2CL; PMSL2; Postmeiotic segregation increased, S. cerevisiae, 2;

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Description	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.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	110 kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.