ARG40161
anti-PMS2 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PMS2
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PMS2
Species	Human
Immunogen	Synthetic peptide derived from Human PMS2.
Conjugation	Un-conjugated
Alternate Names	PMS2CL; DNA mismatch repair protein PMS2; HNPCC4; PMS1 protein homolog 2; MLH4; Mismatch repair endonuclease PMS2; PMSL2

Application Instructions

Application table

Application	Dilution
FACS	1:50
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Jurkat
Observed Size	110 kDa

Properties

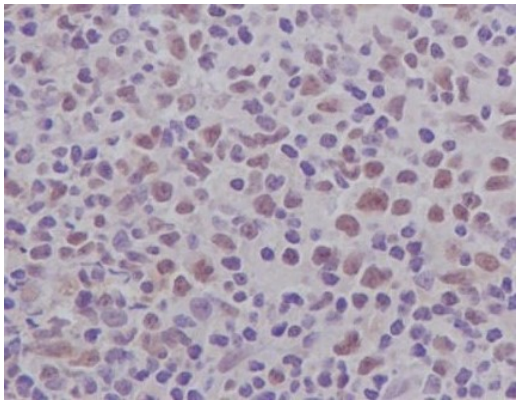
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

	cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PMS2
Gene Full Name	PMS1 homolog 2, mismatch repair system component
Background	This gene is one of the PMS2 gene family members found in clusters on chromosome 7. The product of this gene is involved in DNA mismatch repair. It forms a heterodimer with MLH1 and this complex interacts with other complexes bound to mismatched bases. Mutations in this gene are associated with hereditary nonpolyposis colorectal cancer, Turcot syndrome, and are a cause of supratentorial primitive neuroectodermal tumors. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Jul 2008]
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. [UniProt]
Calculated Mw	96 kDa
Cellular Localization	Nucleus. [UniProt]

Images



ARG40161 anti-PMS2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil stained with ARG40161 anti-PMS2 antibody.

ARG40161 anti-PMS2 antibody WB image

Western blot: Jurkat cell lysate stained with ARG40161 anti-PMS2 antibody.