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Product datasheet for RC210880L4V

PMS2 (NM_000535) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	PMS2 (NM_000535) Human Tagged ORF Clone Lentiviral Particle
Symbol:	PMS2
Synonyms:	HNPCC4; MLH4; MMRCS4; PMS2CL; PMSL2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_000535
ORF Size:	2586 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210880).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_000535.4
RefSeq Size:	2851 bp
RefSeq ORF:	2589 bp
Locus ID:	5395
UniProt ID:	P54278
Cytogenetics:	7p22.1
Domains:	DNA_mis_repair, HATPase_c
Protein Families:	Druggable Genome

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Protein Pathways: Mismatch repair

MW: 95.8 kDa

Gene Summary: The protein encoded by this gene is a key component of the mismatch repair system that functions to correct DNA mismatches and small insertions and deletions that can occur during DNA replication and homologous recombination. This protein forms heterodimers with the gene product of the mutL homolog 1 (MLH1) gene to form the MutL-alpha heterodimer. The MutL-alpha heterodimer possesses an endonucleolytic activity that is activated following recognition of mismatches and insertion/deletion loops by the MutS-alpha and MutS-beta heterodimers, and is necessary for removal of the mismatched DNA. There is a DQHA(X)2E(X)4E motif found at the C-terminus of the protein encoded by this gene that forms part of the active site of the nuclease. Mutations in this gene have been associated with hereditary nonpolyposis colorectal cancer (HNPCC; also known as Lynch syndrome) and Turcot syndrome. [provided by RefSeq, Apr 2016]