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Product datasheet for RG239924

MSH6 (NM_001281493) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MSH6 (NM_001281493) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MSH6
Synonyms:	GTBP; GTMBP; HNPCC5; HSAP; MMRCS3; p160
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

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>RG239924 representing NM_001281493.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC

Protein Sequence:

>Peptide sequence encoded by RG239924
Blue=ORF Red=Cloning site Green=Tag(s)

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Restriction Sites: SgfI-MluI

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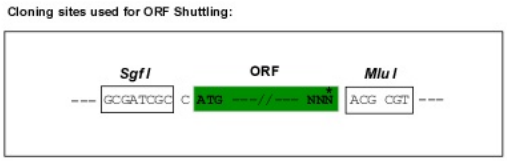
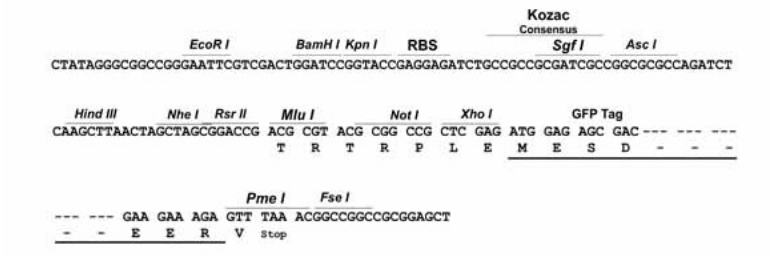
Cloning Scheme:





ACCN:	NM_001281493
ORF Size:	3174 bp
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.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
RefSeq:	NM_001281493.1, NP_001268422.1
RefSeq Size:	4177 bp
RefSeq ORF:	3177 bp
Locus ID:	2956
UniProt ID:	P52701
Cytogenetics:	2p16.3
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Colorectal cancer, Mismatch repair, Pathways in cancer
MW:	120.2 kDa

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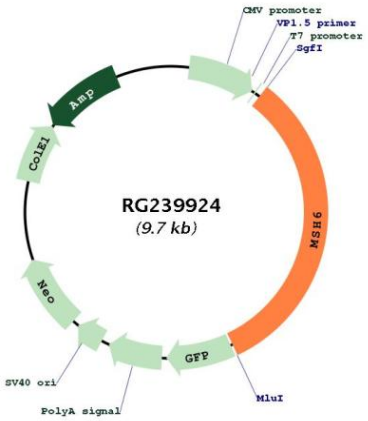
Gene Summary: This gene encodes a member of the DNA mismatch repair MutS family. In E. coli, the MutS protein helps in the recognition of mismatched nucleotides prior to their repair. A highly conserved region of approximately 150 aa, called the Walker-A adenine nucleotide binding motif, exists in MutS homologs. The encoded protein heterodimerizes with MSH2 to form a mismatch recognition complex that functions as a bidirectional molecular switch that exchanges ADP and ATP as DNA mismatches are bound and dissociated. Mutations in this gene may be associated with hereditary nonpolyposis colon cancer, colorectal cancer, and endometrial cancer. Transcripts variants encoding different isoforms have been described. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RG239924

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