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Product datasheet for RG221591

MLH3 (NM_001040108) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MLH3 (NM_001040108) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MLH3
Synonyms:	HNPCC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG221591 representing NM_001040108
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221591 representing NM_001040108
Red=Cloning site Green=Tags(s)

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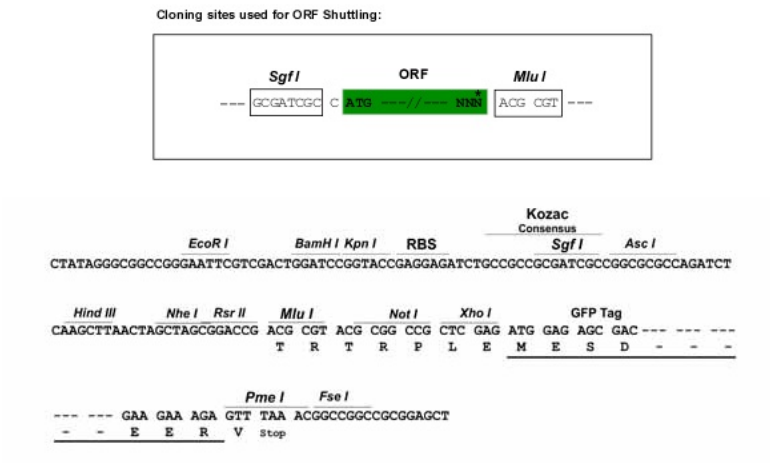
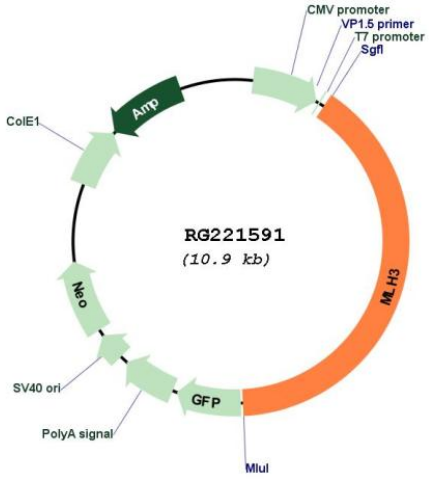
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001040108
ORF Size:	4359 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).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001040108.2
RefSeq Size:	7911 bp
RefSeq ORF:	4362 bp
Locus ID:	27030
UniProt ID:	Q9UHC1
Cytogenetics:	14q24.3
Protein Families:	Druggable Genome
Protein Pathways:	Mismatch repair
Gene Summary:	This gene is a member of the MutL-homolog (MLH) family of DNA mismatch repair (MMR) genes. MLH genes are implicated in maintaining genomic integrity during DNA replication and after meiotic recombination. The protein encoded by this gene functions as a heterodimer with other family members. Somatic mutations in this gene frequently occur in tumors exhibiting microsatellite instability, and germline mutations have been linked to hereditary nonpolyposis colorectal cancer type 7 (HNPCC7). Several alternatively spliced transcript variants have been identified, but the full-length nature of only two transcript variants has been determined. [provided by RefSeq, Jul 2008]