

## Product datasheet for **RG237598**

### MVK (NM\_001301182) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MVK (NM_001301182) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MVK
Synonyms:	LRBP; MK; MVLK; POROK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237598 representing NM_001301182. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTGTCAGAAGTCCTACTGGTGTCTGCTCCGGGAAAGTCATCCTTCATGGAGAACATGCCGTGGTA
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CTGGACACAAGCTTTCTGGAGCAAGGTGATGTACAACACCCACCTCAGAGCAAGTGGAGAAGCTAAAG
GAGGTTGCAGGCTTGCCTGACGACTGTGCTGTACCGAGCGCCTGGCTGTGCTGGCCTTTCTTTACTTA
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CTCCGATACCATCAAGGGAAGATTTTCATCCTTAAAGAGGTCGCCAGCTCTCCAGATCCTGCTGACCAAC
ACCAAAGTCCCTCGAATACCAGGGCCCTGTGGCTGGCGTCAGAAACAGGCTGCTCAAGTTCACAGAG
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AGCAAGCTGACTGGCGCAGGCGGTGGTGGCTGTGGCATCACACTCCTCAAGCCAGGGCTGGAGACGCCA
GAAGTGGAGGCCACGAAGCAGGCCCTGACCAGCTGTGGCTTTGACTGCTTGGAAACCAGCATCGGTGCC
CCCGGCGTCTCCATCCACTCAGCCACCTCCCTGGACAGCCGAGTCCAGCAAGCCCTGGATGGCCTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237598  
 Blue=ORF Red=Cloning site Green=Tag(s)

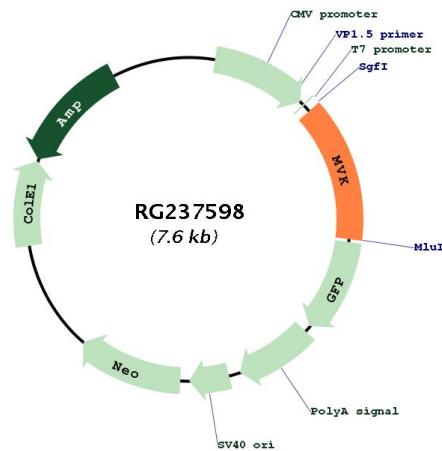
MLSEVLLVSAPGKVIHGEHAVVHGKVALAVSLNLRFLRLQPHSNGKVDLSLPNIGIKRAWDVARLQS  
 LDTSFLEQGDVTTPTSEQVEKLKEVAGLPDDCAVTERLAVLAFLLYLALYLSICRKRQWTKEDLEL INKWAF  
 QGERMIHGNSGVDNAVSTWGGALRYHQKISSLKRSPALQILLTNTKVPNRTRALVAGVRNRLKFP  
 IVAPLLTSIDAISLECERVLGEMGEAPEQYLVEELIDMNQHHLNALGVGHASLDQLCQVTRARGLH  
 SKLTGAGGGGCGITLLKPGLEQPEVEATKQAL TSCGFDCL ETSIGAPGVS IHSATSLDSRVQQALDGL  
**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV**  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001301182

<b>ORF Size:</b>	1032 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001301182.2</a>
<b>RefSeq Size:</b>	1928 bp
<b>RefSeq ORF:</b>	1035 bp
<b>Locus ID:</b>	4598
<b>UniProt ID:</b>	<a href="#">Q03426</a>
<b>Cytogenetics:</b>	12q24.11
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Terpenoid backbone biosynthesis
<b>MW:</b>	37.6 kDa
<b>Gene Summary:</b>	This gene encodes the peroxisomal enzyme mevalonate kinase. Mevalonate is a key intermediate, and mevalonate kinase a key early enzyme, in isoprenoid and sterol synthesis. Mevalonate kinase deficiency caused by mutation of this gene results in mevalonic aciduria, a disease characterized psychomotor retardation, failure to thrive, hepatosplenomegaly, anemia and recurrent febrile crises. Defects in this gene also cause hyperimmunoglobulinaemia D and periodic fever syndrome, a disorder characterized by recurrent episodes of fever associated with lymphadenopathy, arthralgia, gastrointestinal dismay and skin rash. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]