

Product datasheet for **RC200451**

MVD (NM_002461) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MVD (NM_002461) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MVD
Synonyms:	FP17780; MDDase; MPD; POROK7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200451 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTCGGAGAAGCCGCTGGCGGCAGTCACTTGTACAGCGCCGGTCAACATCGCGGCATCAAGTACT
GGGGCAAGCGGATGAAGAGCTGGTTCTGCCATCAACTCCTCCCTGAGCGTCACTCTGCACCAGGACCA
GTTAAAAACCACCACAACAGCCGTCATCAGCAAGGACTTCACCGAGGACCGGATTTGGCTGAATGGCCGG
GAGGAGGATGTGGGCAGCCGAGGCTGCAGGCCTGCCTGCGGGAGATCCGCTGCCTGGCCCGGAAGCGGA
GGAACCTACGGGATGGGGACCCGCTGCCCTCCAGCCTCAGCTGCAAGGTGCACGTGGCATCGGTGAACAA
CTTCCCCACGGCTGCGGGCCTGGCTCCTCAGCGCGGGCTATGCCTGCCTAGCCTACACCTGGCCCGT
GTCTACGGCGTGGAGAGTGACCTCTCAGAAGTGGCTCGCCGGGGCTCAGGCAGCGCCTGCCGGAGCCTGT
ATGGGGGCTTTGTGGAGTGGCAGATGGGAGAGCAGGCCGACGGGAAGGACAGCATCGCTCGGCAAGTGGC
CCCCGAGTCACACTGGCCTGAATCCGCGTGCTCATCCTTGTGGTGGAGCGCTGAGAAGAAGTGCAGGC
AGTACCGTGGGCATGCGGGCAGTGTGGAGACCAGCCCTGCTTCGGTTCGGGGCCGAGTCCGTGGTGC
CCGCGCATGGCGGAGATGGCCCGTGCATCCGGGAGCGAGACTTCCCCAGCTTCGCCAGCTGACCAT
GAAGGACAGCAACCAGTCCACGCCACCTGCCTCGACACCTTCCCGCCATCTCTTACCTCAATGCCATC
TCCTGGCGCATCATCCACTGGTGCACCGCTTCAACGCCACACGGGGACACCAAGTGGCGTACACAT
TTGACGGGGCCCAATGCCGTGATCTTACCCTGGACGACACTGTGGCTGAGTTTGTGGCTGCTGTGTG
GCACGGCTTTCCCCAGGCTCGAATGGAGACAGTCTTGAAGGGGCTGCAGGTGAGGCCGGCCCTCTC
TCAGCTGAGCTTCAGGCTGCGCTGGCCATGGAGCCGACCCCGGTGGGGTCAAATACATCATTGTCACTC
AGGTGGGGCCAGGGCCTCAAATCCTGGATGACCCTGCGCCACCTCCTGGGTCTGACGGCCTGCCGAA
GCCAGCTGCC

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200451 protein sequence
Red=Cloning site Green=Tags(s)

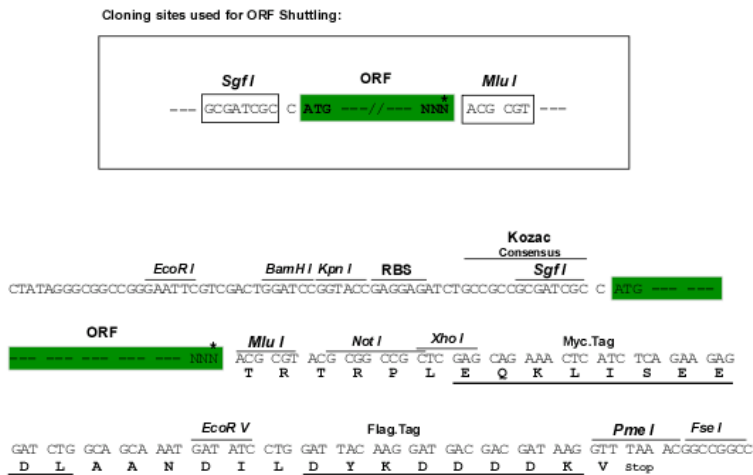
MASEKPLAAVTCTAPVNIIVIKYWGRDEELVLPINSSLSVTLHQDQLKTTTTAVISKDFTEDRIWLNGR
 EEDVGGPRLQACLREIRCLARKRRNSRDGDLPSLSCKVHVASVNNFPTAAGLASSAAGYACLAYTLAR
 VYGVESDLSEVARRGSGSACRSLYGGFVEWQMGEQADGKDSIARQVAPESHWPFLRVLILVVSAEKKTG
 STVGMRASVETSPLLRFRAESVVPARMAEMARCIRERDFPSFAQLTMKDSNQFHATCLDTFPPISYLNAI
 SWRIIHLVHRFNAHHGDTKVAYTFDAGPNAVIFTLDDTVAEFVAAVWHGFPPGSGNDTFLKGLQVRPAPL
 SAELQAALAMEPTPGGVKYYIIVTQVGPQPQILDPCAHLLGPDGLPKPAA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6583_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_002461

ORF Size: 1200 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_002461.1](#), [NP_002452.1](#)

RefSeq Size: 1812 bp

RefSeq ORF: 1203 bp

Locus ID: 4597

UniProt ID: [P53602](#)

Cytogenetics: 16q24.2

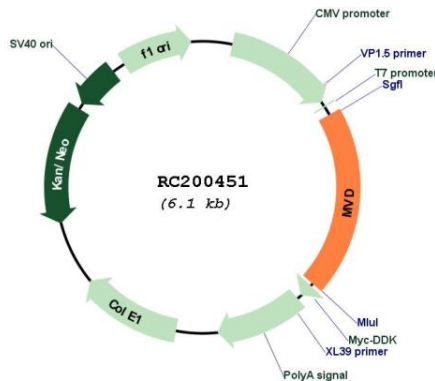
Domains: GHMP_kinases

Protein Pathways: Metabolic pathways, Terpenoid backbone biosynthesis

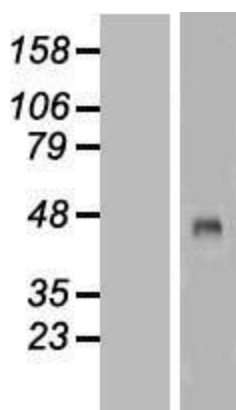
MW: 43.4 kDa

Gene Summary: The enzyme mevalonate pyrophosphate decarboxylase catalyzes the conversion of mevalonate pyrophosphate into isopentenyl pyrophosphate in one of the early steps in cholesterol biosynthesis. It decarboxylates and dehydrates its substrate while hydrolyzing ATP. [provided by RefSeq, Jul 2008]

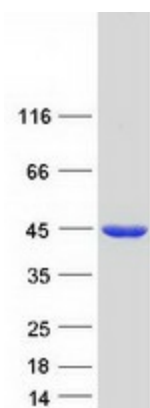
Product images:



Circular map for RC200451



Western blot validation of overexpression lysate (Cat# [LY419305]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200451 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MVD protein (Cat# [TP300451]). The protein was produced from HEK293T cells transfected with MVD cDNA clone (Cat# RC200451) using MegaTran 2.0 (Cat# [TT210002]).