

## Product datasheet for **RC206162**

### HMGCLL1 (NM\_001042406) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HMGCLL1 (NM_001042406) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HMGCLL1
Synonyms:	bA418P12.1; er-cHL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206162 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGGAATGTGCCATCCGCGGTGAAGCACTGCCTCAGCTACCAGCAGCTTCTCCGGGAGCATCTCTGGA  
TCGGGGATTCAAGTGGCAGGGGCGCTCGACCCCGCAGGAAACATCCCAGTTATCTGGACTCCCTGAGTT  
TGTTAAAATAGTAGAAGTTGGGCTAGGGATGGATTGCAGAATGAAAAGTTATAGTTCTACAGATATA  
AAAATTGAATTTATCAATCGACTTCCCAAAGTGGCTTGTCTGTAATAGAAGTGACTAGCTTTGTGTCTT  
CCAGATGGGTACCACAGATGGCTGATCACACTGAAGTAATGAAAGGCATTCATCAATATCCAGGAGTTCCG  
CTATCCTGTCTTACTCCTAATCTTCAGGGTTTTACCATGCTGTTGCTGCTGGAGCTACTGAGATATCA  
GTTTTTGGAGCTGCATCTGAATCCTTTAGCAAGAAGAATATTAAGTGTCCATTGAAGAAAGTATGGGAA  
AATTTGAGGAGTTGTTAAGTCTGCAAGACACATGAATATCCAGCACGAGGGTATGTGTCTTGTGCTCT  
GGGCTGTCCATATGAAGGAAGTATTACACCGCAAAAAGTACAGAAAGTGTCTAAGAGATTGTACGGCATG  
GGTTGTTATGAGATCTCTAGGAGACACAATTGGAGTGGAACTCCAGGAAGTATGAAAAGAATGTTGG  
AAAGTGTGATGAAAGAAATCCCACCAGGTGCTCTTGTCTGTTCACTGTGATGACACATACGGACAAGCCTT  
AGCAAATATCCTTACGGCCCTTCAGATGGGAATTAATGTGGTGGACTCCGCAGTATCCGGATTAGGTGGC  
TGCCCTTATGCAAAGGTGCTTCTGGGAATGTAGCCACTGAGGATTTGATATATGCTTAAATGGCCTGG  
GGCTCAATACAGGTGTGAATCTATACAAAAGTATGGAAGCTGGTACTTTATTTGCAAAGCTGTGAATAA  
AACCACAACTCTAAAGTAGCACAAAGCCTCCTCAATGCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC206162 protein sequence  
 Red=Cloning site Green=Tags(s)

MGNVPSAVKHCLSYQQLREHLWIGDSVAGALDPAQETSLSGLPEFVKIVEVGPRDGLQNEKVIIVPTDI  
 KIEFINRLSQTGLSVIEVTSFVSSRWVPQADHTEVMKGIHQYPGVRYPLTPNLQGFHHAVAAGATEIS  
 VFGAASESFSKKNINCSIEESMGKFEEVVK SARHMNIPARGYVSCALGCPYEGSITPQKVTEVSKRLYGM  
 GCYEISLGDITIGVGTGPGSMKRMLE SVMKEIPPGALAVHCHD TYGQALANILTALQMGINVVDSAVSGLGG  
 CPYAKGASGNVATEDLIYMLNGLGLNTGVNLYK VMEAGDFICKAVNKTTNSKVAQASFNA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6317\\_d07.zip](https://cdn.origene.com/chromatograms/mk6317_d07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001042406

**ORF Size:** 1020 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001042406.2](#)

**RefSeq Size:** 2481 bp

**RefSeq ORF:** 1023 bp

**Locus ID:** 54511

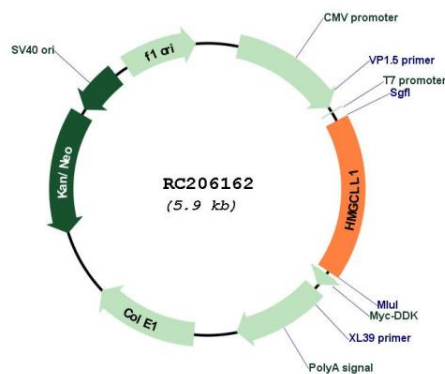
**UniProt ID:** [Q8TB92](#)

**Cytogenetics:** 6p12.1

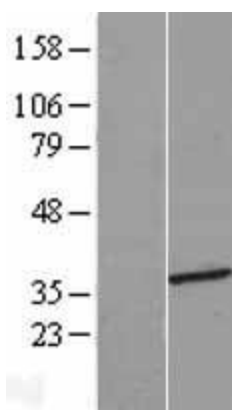
**MW:** 36.3 kDa

**Gene Summary:** Non-mitochondrial 3-hydroxymethyl-3-methylglutaryl-CoA lyase that catalyzes a cation-dependent cleavage of (S)-3-hydroxy-3-methylglutaryl-CoA into acetyl-CoA and acetoacetate, a key step in ketogenesis, the products of which support energy production in nonhepatic animal tissues.[UniProtKB/Swiss-Prot Function]

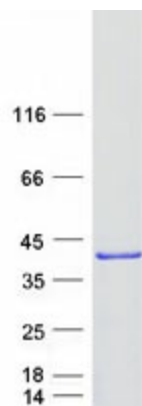
## Product images:



Circular map for RC206162



Western blot validation of overexpression lysate (Cat# [LY420884]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206162 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HMGCLL1 protein (Cat# [TP306162]). The protein was produced from HEK293T cells transfected with HMGCLL1 cDNA clone (Cat# RC206162) using MegaTran 2.0 (Cat# [TT210002]).