

## Product datasheet for **RC238566**

### 2 Hydroxy phytanoyl CoA lyase (HACL1) (NM\_001284416) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	2 Hydroxy phytanoyl CoA lyase (HACL1) (NM_001284416) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HACL1
Synonyms:	2-HPCL; HPCL; HPCL2; PHYH2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC238566 representing NM\_001284416  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCGGACAGTAACTTCGACAGCGCAGCGAGGAGCAGGTGTCTGGTGCTAAAGTCATCGCTCAGGCC  
 TGA AACGCAAGATGTGGAGTACATATTTGGCATCGTAGGCATCCAGTGACCGAAATCGCCATTGCTGC  
 CCAGCAGCTAGGCATCAAGTACATCGGGATGAGGAATGAGCAAGCGGCTTGTATGCTGCCTCCGCGATT  
 GGATATCTGACAAGCAGGCCAGGAGTCTGCCTTGTGTTTCTGGCCAGGTCTCATCCATGCCTTGGGCG  
 GTATGGCAAATGCAAACATGAACTGCTGGTACATGGAACGCTGCATGTCACCTCTATTAGCATGGCAGA  
 AACCTCTGCTGTGTGCACGGCGGCTTCTGTTATTAGGAATGCCAAACAACCCCTTCTTATCATCGGGAAA  
 GGTGCTGCTTACGCTCATGCAGAAGAGAGTATCAAGAAATGGTGGAGCAATATAAACTGCCATTTTGC  
 CCACCCCTATGGGAAGGGTGTGTCCCTGACAACCATCCATACTGTGTAGGTGCAGCCAGATCCAGGGC  
 TTTGCAATTTGCTGATGTAATTGTGTTATTTGGTGCCAGACTAAATTGGATTTTACATTTTGGACTGCCT  
 CCAAGATATCAGCCAGATGTGAAGTTTATCCAGGTTGATATCTGTGCAGAAGAATTGGGGAATAATGTAA  
 AGCCCGCTGTTACTTTGCTAGGAAACATACATGCTGCTACTAAGCAGCTTTTAGAGGAACCTGATAAAAC  
 ACCATGGCAGTATCCTCCAGAGAGCAAGTGGTGGAAAACCTCTGAGAGAAAAATGAAGAGCAATGAAGCT  
 GCATCCAAGGAAGTAGCTTCTAAAAATCCCTGCCTATGAATTATTACACAGTATTCTACCATGTTCAAG  
 ACAAACACTAGAGACTGTTTCGTGGTAAAGTGAAGGAGCAAATACTATGGACATTGGACGGACTGTGCT  
 TCAGAACTACCTCCTCGTCACAGGCTTGATGCTGGTACTTTCCGAAACATGGGAGTTGGTTTGGGATTT  
 GCTATTTGCAGCTGCCGTGGTGGCTAAAGATAGAAGCCCTGGGCAATGGATCATCTGTGTGGAAGGAGACA  
 GTGCAATTTGGGTTTTCTGGCATGGAGGTAGAAACCATCTGCAGGTACAACCTTGCCAATCACTGTTGGT  
 AGTGAATAACAATGGAATTTACCAAGGTTTTGATACAGATACTTGAAAGAAATGTTAAAAATTTCAAGAT  
 GCTACTGCAGTGGTCCCTCCAATGTGTTTCTGCCAAATTCACATTATGAGCAAGTCATGACTGCATTTG  
 GAGGCAAAGGGTATTTTGTACAAACACCAGAAGAACTCCAAAAATCCCTGAGGCAGAGCCTAGCAGACAC  
 AACTAAACCTTCTCTTATCAACATCATGATTGAGCCACAAGCCACACGGAAGGCCAGGATTTTCATTGG  
 CTGACCCGCTCTAATATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238566 representing NM\_001284416  
 Red=Cloning site Green=Tags(s)

MPDSNFAERSEEQVSGAKVIAQALKTQDVEYIFGIVGIPVTEIAIAAQQLGIKYIGMRNEQAACYAASAI  
 GYLTSRPGVCLVVSGLIHALGGMANANMNCWYMERCMSPPI SMAETS AVCTAASVIRNAKQPLLIIGK  
 GAAYAHAEESIKKLVEQYKLPFLPTPMGKGVVDPNHPYCVGAARSRALQFADVIVLFGARLNWILHFGLP  
 PRYQPDVKFIQVDICAEELGNNVKPAVTL L GNIHAVTKQLLEELDKTPWQYPPESKWWKTLREKMSNEA  
 ASKELASKKSLPMNYTVFYHVQEQLPRDCFVSEGAN TMDIGRTVLQNYLPRHRLDAGFTGMVGLGF  
 AIAAAVVAKDRSPGQWIIICVEGDSAFGFSGMEVETICRYNLPIILLVVNNNGIYQGFDTDTWKEMLFQD  
 ATAVVPPMCLLPNSHYEQVMTAFGGKGYFVQTPPEELQKSLRQSLADTTKPSLINIMIEPQATRKAQDFHW  
 LTRSNM

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

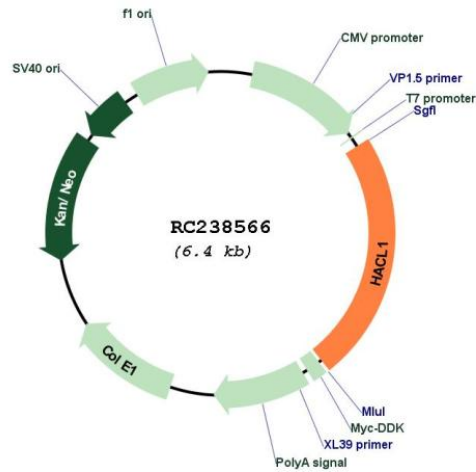
Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

## Plasmid Map:



ACCN: NM\_001284416

ORF Size: 1488 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\\_001284416.2](#)

**RefSeq Size:** 2041 bp

**RefSeq ORF:** 1491 bp

**Locus ID:** 26061

**UniProt ID:** [Q9UJ83](#)

**Cytogenetics:** 3p25.1

**MW:** 55.2 kDa

**Gene Summary:** Catalyzes a carbon-carbon cleavage reaction; cleaves a 2-hydroxy-3-methylacyl-CoA into formyl-CoA and a 2-methyl-branched fatty aldehyde.[UniProtKB/Swiss-Prot Function]