

## Product datasheet for **RC209197**

### HLCS (NM\_000411) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HLCS (NM_000411) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HLCS
Synonyms:	HCS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RC209197 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAAGATAGACTCCACATGGATAATGGACTGGTACCCCAAAGATTGTGTCGGTGCCTTGCAGGACT  
 CCACTCTGAAGGAAGTTAAGGATCAGGTCTCAAACAAGCAAGCCAGATCCTAGAGCCGAAGCCTGAACC  
 TTCTCTTGAGATTAAGCCTGAGCAGGACGGTATGGAGCATGTTGGCAGAGATGACCCAAAGGCTCTTGTT  
 GAAGAACCCAAACAAGGAGAGGAGCAGTGCCTCTGGGAGTGAAGCCTGCTGGGGACAGTGACAGGGGAGGGG  
 GCCCGTTGAGCATTATCACCTCCATCTGTCTAGTTGCCACGAGTGTCTGGAACCTGAGAACAGCACCAT  
 TGAGTCAGTCAAGTTTTCGTCTGCCGAGAACATCCAGACCTCCCTACGATTATAGCAGCAGTTTGGAG  
 AGTGTGTGATGAGACCTCCCCGAAAGAGAAGGGAGGAGTCAACCTCACGGGAAAGGCACCCAACA  
 TCCTCCTCTATGTGGCTCCGACTCCAGGAAGCCCTCGGCCGGTCCACGAGGTCGGTCTGTGCTGGC  
 CGACTGTGTGGACATTGACAGTTATATTCTCTACCACCTGCTGGAGGACAGTGTCTCAGAGACCCGTGG  
 ACGGACAACCTGTCTGCTGTTGGTCAATTGCTACCAGGGAGTCCATCCCGAAGACCTGTACCAAGAAGTTCA  
 TGGCCTATCTTTCTCAGGGAGGGGAAAGGTGTTGGGCCTGTCTTCATCCTTCACCTTTGGTGGCTTTCAGGT  
 GACAAGCAAGGGTGCCTGCACAAGACAGTCCAGAACCTGGTTTTCTCCAAGGCTGACCAGAGTGAGGTG  
 AAGCTCAGCGTCTTGAGCAGTGGCTGCAGGTACCAGGAAGGCCCGTCCGGCTCAGCCCCGGCAGGCTCC  
 AGGGCCACCTGGAGAATGAGGACAAGGACAGGATGATTGTGATGTGCCTTTTGGAACTCGCGGGGAGAGA  
 AGCTGTTCTTTGCCAGGTGCCTTAGAACTACCTCCAGCTCCAACATAGTGAACTCCAGAAGATTTT  
 AACTTGCTCAAGTCAAGCAATTTTAGAAGATACGAAGTCCTTAGAGAGATTCTGACAACCTTGGCCTCA  
 GCTGTGACATGAAACAAGTTCTGCCTTAACTCCTTTACTTGTCTGCTGAGCTGCGGAGGAAATCAGGCA  
 TCCTCTTATGCAGTGGCTTGGGAAACATGTGGACTCCGAGGGAGAAATAAATCCGGCCAGCTCTCTCTT  
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 CAGGAAATGGGCTTAATAGTGATCGCGGCCGAGACCAGGGCAAAGGACGGGAGGGGAAATGTGTGGC  
 TGAGCCCTGTGGGATGTGCTCTTCTACTCTGCTCATCTCCATCCACTGAGATCCAGCTGGGACAGAG  
 GATCCCGTTTGTCCAGCATCTGATGTCCGTGGCTGTCTGGAAGCAGTGAGGTCCATCCCGAGTATCAG  
 GATATCAACTTACGAGTGAAGTGGCCCAACGATATTTATTACAGTGACCTCATGAAGATCGGCGGAGTTC  
 TGGTTAACTCAACTCATGGGAGAAACATTTTATATACTTATTGGCTGTGGATTAATGTGACTAACAG  
 TAACCCTACCATCTGCATCAACGACCTCATCACAGAATAAATAAACAACAAGGCAGAAGTGAAGCCC  
 TTAAGAGCCGATTATCTCATCGCCAGAGTCGTGACTGTGCTGGAGAACTGATCAAAGAGTTTCAGGACA  
 AAGGGCCCAACAGCGTCTTCCCCTTTATTACCGATACTGGGTCCACAGTGGTCAGCAAGTCCATCTGGG  
 CAGCGCAGAGGGACCAAGGTGTCCATCGTTGGCCTGGACGATTCTGGCTTCTCCAGGTTACACAGGAG  
 GGCGGCGAGGTTGTGACTGTGCACCCGGACGGCAACTCCTTCGACATGCTGAGAAACCTCATCTCCCA  
 AACGGCGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC209197 protein sequence  
Red=Cloning site Green=Tags(s)

```
MEDRLHMDNGLVPQKIVSVHLQDSTLKEVKDQVSNKQAQILEPKPEPSLEIKPEQDGMHEVGRDDPKALG
EELPKRRGSASGSEPAAGSDRGGGPVEHYHLHLSSCHECLELENSTIESVKFASAENIPDLPYDYSSSLE
SVADETSPEREGRRVNLTKAPNILLVYGSQSQEALGRFHEVRSVLADCVIDSYILYHLLSALRDPW
TDNCLLLVIATRESIPEDLYQKFMAYLSQGGKVLGLSSSFTFGGFQVTSKGALHKTQNLVFSKADQSEV
KLSVLSGGCRYQEGPVRLLSPGRLQGHLENEKDRMIVHVPFGTRGGEAVLCQVHLELPPSSNIVQTPEDF
NLLKSSNFRRYEVLRILTTLGLSCDMKQVPALTPLYLLSAAEEIRDPLMQWLGHVDSEGEIKSGQLSL
RFVSSYVSEVEITPSCIPVVTNMEAFSSEHFNLEIYRQNLQTKLQKLVILFAEVTPTMRLLDGLMFQTP
QEMGLIVIAARQTEGKGRGGNVWVSPVGCALSTLLISIPLRSQLGQRIPFVQHLMSVAVVEAVRSIPEYQ
DINLRVKWPNDIYSDLMKIGGVLVNSTLMGETFYILIGCGFNVNTSNPTICINDLITEYNKQHKAEKLP
LRADYL IARVVTVLEKLIKEFQDKGPNVLPYRYWVHSGQQVHLGSAEGPKVSIIVGLDDSGFLQVHQE
GGEVVTVHPDGNISFDMLRNLILPKRR
```

TRTRPLEQKLISEEDLANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6155\\_f09.zip](https://cdn.origene.com/chromatograms/mk6155_f09.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\_000411

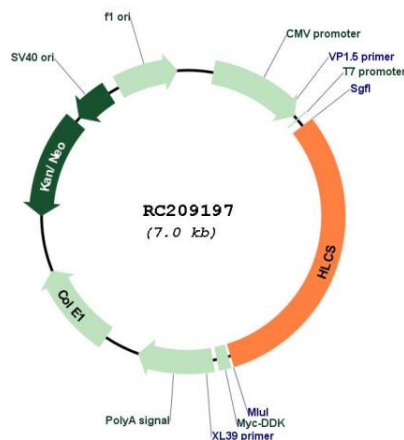
**ORF Size:** 2178 bp

**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](#)

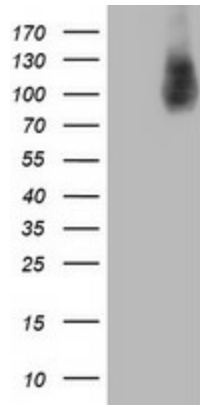
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_000411.8</a></u>
<b>RefSeq Size:</b>	6019 bp
<b>RefSeq ORF:</b>	2181 bp
<b>Locus ID:</b>	3141
<b>UniProt ID:</b>	<u><a href="#">P50747</a></u>
<b>Cytogenetics:</b>	21q22.13
<b>Domains:</b>	BPL_C, BPL_LipA_LipB
<b>Protein Pathways:</b>	Biotin metabolism, Metabolic pathways
<b>MW:</b>	80.8 kDa
<b>Gene Summary:</b>	This gene encodes an enzyme that catalyzes the binding of biotin to carboxylases and histones. The protein plays an important role in gluconeogenesis, fatty acid synthesis and branched chain amino acid catabolism. Defects in this gene are the cause of holocarboxylase synthetase deficiency. Multiple alternatively spliced variants, encoding the same protein, have been identified.[provided by RefSeq, Jun 2011]

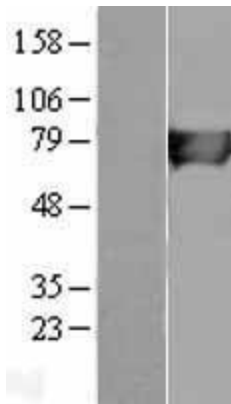
### Product images:



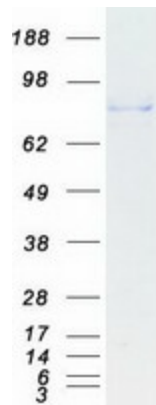
Circular map for RC209197



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HLCS (Cat# RC209197, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HLCS (Cat# [TA504422]). Positive lysates [LY400145] (100ug) and [LC400145] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400145]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209197 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HLCS protein (Cat# [TP309197]). The protein was produced from HEK293T cells transfected with HLCS cDNA clone (Cat# RC209197) using MegaTran 2.0 (Cat# [TT210002]).