

Product datasheet for **RG233103**

HLCS (NM_001242784) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLCS (NM_001242784) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HLCS
Synonyms:	HCS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG233103 representing NM_001242784
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAGATAGACTCCACATGGATAATGGACTGGTACCCCAAAGATTGTGTCGGTGCCTTGCAGGACT
 CCACTCTGAAGGAAGTTAAGGATCAGGTCTCAAACAAGCAAGCCAGATCCTAGAGCCGAAGCCTGAACC
 TTCTCTTGAGATTAAGCCTGAGCAGGACGGTATGGAGCATGTTGGCAGAGATGACCCAAAGGCTCTTGTT
 GAAGAACCCAAACAAGGAGAGGAGCAGTGCCTCTGGGAGTGAAGCCTGCTGGGGACAGTGACAGGGGAGGGG
 GCCCGTTGAGCATTACACCTCCATCTGTCTAGTTGCCACGAGTGTCTGGAACCTGAGAACAGCACCAT
 TGAGTCAGTCAAGTTTTCGTCTGCCGAGAACATCCAGACCTCCCTACGATTATAGCAGCAGTTTGGAG
 AGTGTGTGATGAGACCTCCCCGAAAGAGAAGGGAGGAGTCAACCTCACGGAAAGGCACCCAACA
 TCCTCCTCTATGTGGCTCCGACTCCAGGAAGCCCTCGGCCGGTCCACGAGGTCGGTCTGTGCTGGC
 CGACTGTGTGGACATTGACAGTTATATTCTCTACCACCTGCTGGAGGACAGTGTCTCAGAGACCCGTGG
 ACGGACAACCTGTCTGCTGTTGGTCAATTGCTACCAGGGAGTCCATTCGGAAGACCTGTACCAAGAAGTTCA
 TGGCCTATCTTTCTCAGGGAGGGAAGGTGTTGGGCCTGTCTTCATCCTTACCTTTGGTGGCTTTCAGGT
 GACAAGCAAGGGTGCCTGCACAAGACAGTCCAGAACCTGGTTTTCTCCAAGGCTGACCAGAGCGAGGTG
 AAGCTCAGCGTCTTGAGCAGTGGCTGCAGGTACCAGGAAGGCCCGTCCGGCTCAGCCCCGGCAGGCTCC
 AGGGCCACCTGGAGAATGAGGACAAGGACAGGATGATTGTGCATGTGCCTTTTGGAACTCGCGGGGAGAG
 AGCTGTTCTTTGCCAGGTGCCTTAGAACTACCTCCAGCTCCAACATAGTGCAAACTCCAGAAGATTTT
 AACTTGCTCAAGTCAAGCAATTTTAGAAGATACGAAGTCCTTAGAGAGATTCTGACAACCTTGGCCTCA
 GCTGTGACATGAAACAAGTTCTGCCTTAACTCCTCTTTACTTGTGTCAGCTGCGGAGGAAATCGGGA
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 CAGGAAATGGGCTTAATAGTGATCGCGGCCGGCAGACCGAGGGCAAAGGACGGGAGGGAATGTGTGGC
 TGAGCCCTGTGGGATGTGCTCTTCTACTCTGCTCATCTCCATCCACTGAGATCCAGCTGGGACAGAG
 GATCCCGTTTGTCCAGCATCTGATGTCCGTGGCTGTCTGGAAGCAGTGAGGTCCATTCGAGTATCAG
 GATATCAACTTACGAGTGAAGTGGCCCAACGATATTTATTACAGTGACCTCATGAAGATCGGCGGAGTTC
 TGGTTAACTCAACTCATGGGAGAAACATTTTATATACTTATTGGCTGTGGATTTAATGTGACTAACAG
 TAACCCTACCATCTGCATCAACGACCTCATCACAGAATAACAATAACAACAAGGCAGAAGTGAAGCCC
 TTAAGAGCCGATTATCTCATCGCCAGAGTCGTGACTGTGCTGGAGAACTGATCAAAGAGTTTCAGGACA
 AAGGGCCCAACAGCGTCTTCCCCTTTATTACCGATACTGGGTCCACAGTGGTCAGCAAGTCCATCTGGG
 CAGCGCAGAGGGACCAAGGTGTCCATCGTTGGCCTGGACGATTCTGGCTTCTCCAGGTTACACAGGAG
 GGCGCGAGGTTGTGACTGTGCACCCGGACGGCAACTCCTTCGACATGCTGAGAACTCATCTCCCA
 AACGGCGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG233103 representing NM_001242784
 Red=Cloning site Green=Tags(s)

MEDRLHMDNGLVPQKIVSVHLQDSTLKEVKDQVSNKQAQILEPKPEPSLEIKPEQDGMHEVGRDDPKALG
 EEPKQRRGSASGSEPAGDSDRGGPVEHYHLHLSSCHECLELENSTIESVKFASAENIPDLPYDYSSSLE
 SVADETSPEREGRRVNLTGKAPNILLVYVSDSQEALGRFHEVRSVLADCVDIDSYILYHLLSDALSALRDPW
 TDNCLLLVIATRESIPEDLYQKFMAYLSQGGKVLGLSSSFTFGGFQVTSKGALHKTQNLVFSKADQSEV
 KLSVLSSGCRYQEGPVRLLSPGRLLQGHLENDKDRMIVHVVPFGTRGGEAVLCQVHLELPPSSNIVQTPEDF
 NLLKSSNFRRYEVLEILTTLGLSCDMKQVPALTPLYLLSAAEEIRDPLMQWLGKHVDSEGEIKSGQLSL
 RYVSSYVSEVEITPSCIPVVTNMEAFSSEHFNLEIYRQNLQTKQLGKIVILFAEVTPTMRLLDGLMFQTP
 QEMGLIVIAARQTEGKGRGGNVWLSPVGCALSTLLISIPLRSQLGQRIPFVQHLMSVAVVEAVRSIPEYQ
 DINLRVKWPNDIYSDLMKIGGVLVNSTLMGETFYILIGCGFNVTNSNPTICINDLITEYNKQHKAEKLP
 LRADYL IARVVTVLEKLIKEFQDKGPNSVLPYRYWVHSGQQVHLGSAEGPKVSIIVGLDDSGFLQVHQE
 GGEVVTVHPDGNISFDMLRNLILPKRR

TRTRPLE - GFP Tag - V

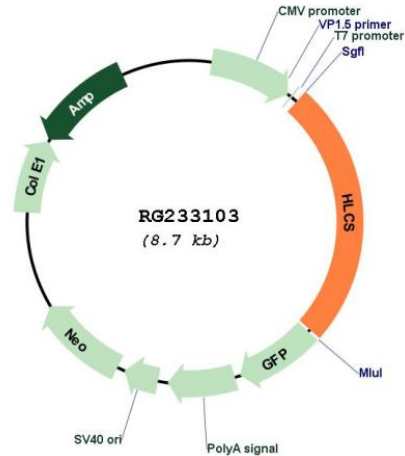
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001242784

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.

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_001242784.3](#)

RefSeq Size: 6953 bp

RefSeq ORF: 2181 bp

Locus ID: 3141

UniProt ID: [P50747](#)

Cytogenetics: 21q22.13

Protein Pathways: Biotin metabolism, Metabolic pathways

Gene Summary: 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]