

## Product datasheet for RC201752

### HADHSC (HADH) (NM\_005327) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HADHSC (HADH) (NM_005327) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HADHSC
Synonyms:	HAD; HADH1; HADHSC; HCDH; HHF4; MSCHAD; SCHAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201752 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTTCGTCACCAGGCAGTTCATGCGTTCGTCCTCCTCGTCCACCGCCTCGGCCTCGGCCAAGA  
AGATAATCGTCAAGCACGTGACGGTCATCGGCGCGGGCTGATGGGCGCCGGCATTGCCAGGTTGCTGC  
AGCAACTGGTCACACAGTAGTGTGGTAGACCAGACAGAGGACATCCTGGCAAAATCCAAAAGGGAAAT  
GAGGAAAGCCTTAGGAAAGTGGCAAAGAAGAAGTTGCAGAAAACCTAAGGCCGGCGATGAATTTGTGG  
AGAAGACCCTGAGCACCATAGCGACCAGCACGGATGCAGCCTCCGTTGTCCACAGCACAGACTTGGTGGT  
GGAAGCCATCGTGAGAAATCTGAAGGTGAAAAACGAGCTTTCAAAGGCTGGACAAGTTTGTCTGCTGAA  
CATACAATCTTTGCCAGCAACACTTCCTCCTTGCAGATTACAAGCATAGCTAATGCCACCACCAGACAAG  
ACCGATTTCGCTGGCCTCCATTTCTCAACCCAGTGCCTGTGTAAGACTTGTGGAGGTCATTAACACC  
AATGACCAGCCAGAAGACATTTGAATCTTTGGTAGACTTTAGCAAAGCCCTAGGAAAGCATCCTGTTTCT  
TGCAAGGACACTCCTGGGTTTATTGTGAACCGCCTCCTGGTCCATACCTCATGGAAGCAATCAGGCTGT  
ATGAACGAGGTGACGCATCCAAAGAAGACATTGACACTGCTATGAAATAGGAGCCGGTTACCCCATGGG  
CCCATTGAGCTTCTAGATTATGTCGGACTGGATACTACGAAGTTCATCGTGGATGGGTGGCATGAAATG  
GATGCAGAGAACCATTACATCAGCCCAGCCCATCCTTAATAAGCTGGTAGCAGAGAACAAGTTCGGCA  
AGAAGACTGGAGAAGGATTTTACAAATACAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC201752 protein sequence  
Red=Cloning site Green=Tags(s)

MAFVTRQFMRSVSSSSTASASAKKIIVKHVTVIGGGLMGAGIAQVAAATGHTVVLDQTEDILAKSKKGI  
 EESLRKVAKKKFAENPKAGDEFVEKTLSTIATSTDAASVVHSTDLVVEAIVENLKVKNELFKRLDKFAAE  
 HTIFASNTSSLQITSIANATTRQDRFAGLHFFNPVPMKLVVEIKTPMTSQKTFESLVDFSKALGKHPVS  
 CKDTPGFIVNRLLVPYLMEAIRLYERGDASKEDIDTAMKLGAGYPMGPFELLDYVGLDTTKFIVDGWHEM  
 DAENPLHQPSPLNKLVAENKFGKKTGEFYKYK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6092\\_f02.zip](https://cdn.origene.com/chromatograms/mk6092_f02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005327

**ORF Size:** 942 bp

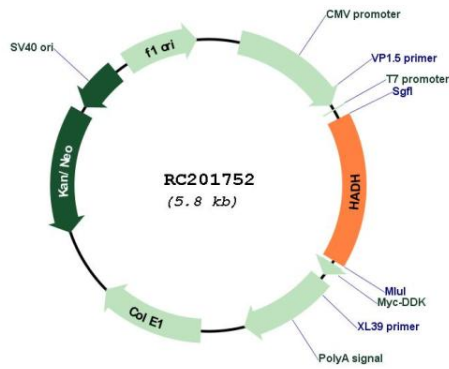
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

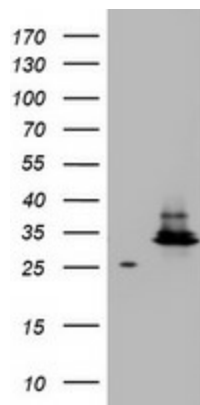
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>	<a href="#">NM_005327.6</a>
<b>RefSeq Size:</b>	1986 bp
<b>RefSeq ORF:</b>	945 bp
<b>Locus ID:</b>	3033
<b>UniProt ID:</b>	<a href="#">Q16836</a>
<b>Cytogenetics:</b>	4q25
<b>Domains:</b>	3HCDH, 3HCDH_N
<b>Protein Pathways:</b>	Butanoate metabolism, Fatty acid elongation in mitochondria, Fatty acid metabolism, Lysine degradation, Metabolic pathways, Tryptophan metabolism, Valine, leucine and isoleucine degradation
<b>MW:</b>	34.3 kDa
<b>Gene Summary:</b>	This gene is a member of the 3-hydroxyacyl-CoA dehydrogenase gene family. The encoded protein functions in the mitochondrial matrix to catalyze the oxidation of straight-chain 3-hydroxyacyl-CoAs as part of the beta-oxidation pathway. Its enzymatic activity is highest with medium-chain-length fatty acids. Mutations in this gene cause one form of familial hyperinsulinemic hypoglycemia. The human genome contains a related pseudogene of this gene on chromosome 15. [provided by RefSeq, May 2010]

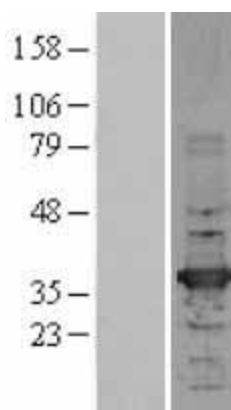
Product images:



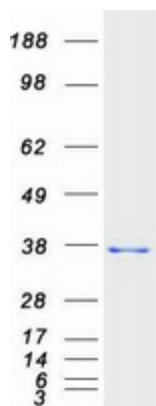
Circular map for RC201752



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HADH (Cat# RC201752, 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-HADH (Cat# [TA802893]). Positive lysates [LY401643] (100ug) and [LC401643] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401643]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201752 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HADH protein (Cat# [TP301752]). The protein was produced from HEK293T cells transfected with HADH cDNA clone (Cat# RC201752) using MegaTran 2.0 (Cat# [TT210002]).