

Product datasheet for **RG209853**

HADHB (NM_000183) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HADHB (NM_000183) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HADHB
Synonyms:	ECHB; MSTP029; MTPB; TP-BETA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG209853 representing NM_000183
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTACTATCTTGACTTACCCTTTAAAAATCTTCCCACTGCATCAAATGGGCCCTCAGATTTTCCA
 TAAGACCTCTGAGCTGTTCTCCAGCTACGAGCTGCCAGCTGCCAGACAAAACGAAGAAGACGTT
 AGCCAAACCCAATATAAGGAATGTTGTGGTGGTGGATGGTGTTCGCACTCCATTTTTGCTGTCTGGCACT
 TCATATAAAGACCTGATGCCACATGATTTGGTAGAGCAGCGCTTACGGGTTTGTTCATCGGACCAGTG
 TCCCTAAGGAAGTAGTTGATTATATCATCTTTGGTACAGTTATTCAGGAAGTAAAAACAAGCAATGTGGC
 TAGAGAGGCTGCCCTGGAGCTGGCTTCTCTGACAAGACTCCTGCTCACACTGTCACCATGGCTTGATC
 TCTGCCAACCAAGCCATGACCACAGGTGTGGCTTGATTGCTTCTGGCCAGTGTGATGTGATCGTGGCAG
 GTGGTGTGAGTTGATGTCGGATGTCCCTATTCGTCACCAAGGAAAATGAGAAAATGATGCTTGATCT
 CAATAAGGCCAAATCTATGGGCCAGCGACTGTCTTAAATCTCTAAATTCGGATTTAATTTCTAGCACCT
 GAGCTCCCTGCGGTTTCTGAGTTCTCCACCACTGAGACCATGGGCCACTCTGCAGACCGACTGGCCGCTG
 CCTTTGCTGTTTCTCGGCTGGAACAGGATGAATATGCACTGCGCTCTCACAGTCTAGCCAAGAAGGCACA
 GGATGAAGGACTCCTTTCTGATGTGGTACCCTTCAAAGTACCAGGAAAAGATACAGTTACCAAAGATAAT
 GGCATCCGTCCTTCTCACTGGAGCAGATGGCCAAACTAAAACCTGCATTCATCAAGCCCTACGGCACAG
 TGACAGCTGCAAATCTTCTTTCTTGACTGATGGTGCATCTGCAATGTTAATCATGGCGGAGGAAAAGGC
 TCTGGCCATGGGTTATAAGCCGAAGGCATATTTGAGGGATTTTATGTATGTGCTCAGGATCCAAAAGAT
 CAACTATTACTTGACCAACATATGCTACTCCTAAAGTTCTAGAAAAGGCAGGATTGACCATGAATGATA
 TTGATGCTTTTGAATTTTCAATGAAGCTTTCTCGGGTCAGATTTTGGCAAATTTTAAAGCCATGGATTCTGA
 TTGGTTTGCAGAAAACACTACATGGGTAGAAAACCAAGGTTGATTGCCTCCTTTGGAGAAGTTTAAATAAC
 TGGGGTGGATCTCTGTCCCTGGGACACCCATTTGGAGCCACTGGCTGCAGGTTGGTCATGGCTGCTGCCA
 ACAGATTACGAAAGAAGGAGGCCAGTATGGCTTAGTGGCTGCGTGTGCAGCTGGAGGGCAGGGCCATGC
 TATGATAGTGAAGCTTATCCAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG209853 representing NM_000183
 Red=Cloning site Green=Tags(s)

MTTILTYPFKNLPTASKWALRFSIRPLSCSSQLRAAPAVQTKKKTLAKPNIRNVVVVDGVRTPFLLSGT
 SYKDLMPHDLARAAL TGLLHRTSVPKEVVDYIIFGTVIQEVKTSNVAREALGAGFSDKTPAHTVTMACI
 SANQAMTTGVGLIASGQCDVIVAGGVELMSDVP IRHSRKMRLMLDLNKA KSMGQRLSLISKFRNFLAP
 ELPVAVSEFSTSETMGHSADRLAAAFVSRLEQDEYALRSHSLAKKAQDEGLLSDVVPFKVPGKDTVTKDN
 GIRPSSLEQMAKLPKPAFIKPYGTVTAANSFLTDGASAMLI MAEEKALAMGYKPKAYLRDFMYVSQDPKD
 QLLLGPYATPKVLEKAGLTMNDIDAFEFHEAFSGQILANFKAMDSDF AENYMRKTKVGLPPLEKFNN
 WGGSLSLGHPFGATGCR LVMAAANRLRKEGGQYGLVAACAAGGQGHAMIVEAYPK

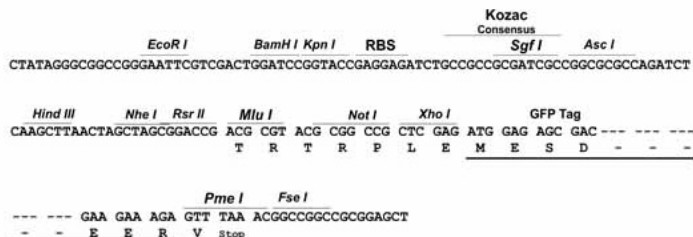
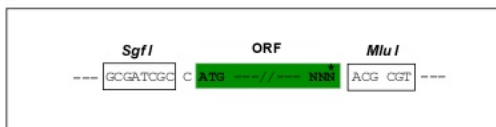
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:


ACCN: NM_000183

ORF Size: 1425 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_000183.2](#), [NP_000174.1](#)
RefSeq Size: 2196 bp

RefSeq ORF: 1425 bp

Locus ID: 3032

UniProt ID: [P55084](#)

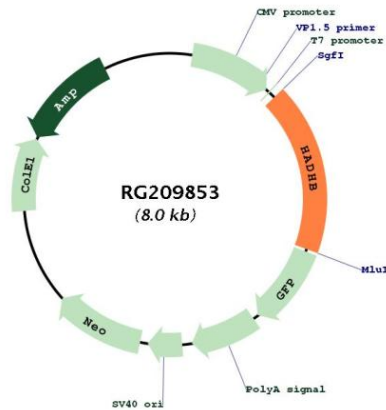
Cytogenetics: 2p23.3

Domains: thiolase

Protein Pathways: Fatty acid elongation in mitochondria, Fatty acid metabolism, Metabolic pathways, Valine, leucine and isoleucine degradation

Gene Summary: This gene encodes the beta subunit of the mitochondrial trifunctional protein, which catalyzes the last three steps of mitochondrial beta-oxidation of long chain fatty acids. The mitochondrial membrane-bound heterocomplex is composed of four alpha and four beta subunits, with the beta subunit catalyzing the 3-ketoacyl-CoA thiolase activity. The encoded protein can also bind RNA and decreases the stability of some mRNAs. The genes of the alpha and beta subunits of the mitochondrial trifunctional protein are located adjacent to each other in the human genome in a head-to-head orientation. Mutations in this gene result in trifunctional protein deficiency. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RG209853