

## Product datasheet for **RG238305**

### HADHB (NM\_001281513) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HADHB (NM_001281513) 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)
ORF Nucleotide Sequence:	>RG238305 representing NM_001281513. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
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```



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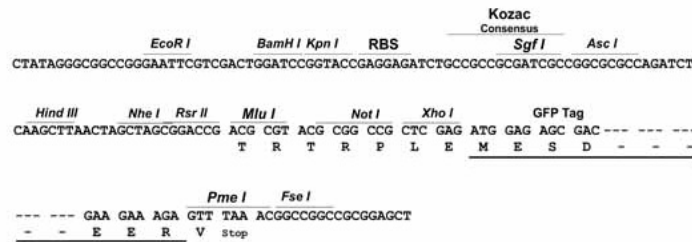
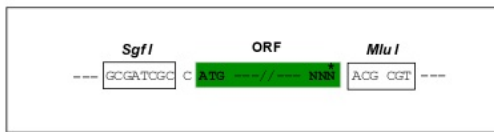
**Protein Sequence:** >Peptide sequence encoded by RG238305  
 Blue=ORF Red=Cloning site Green=Tag(s)

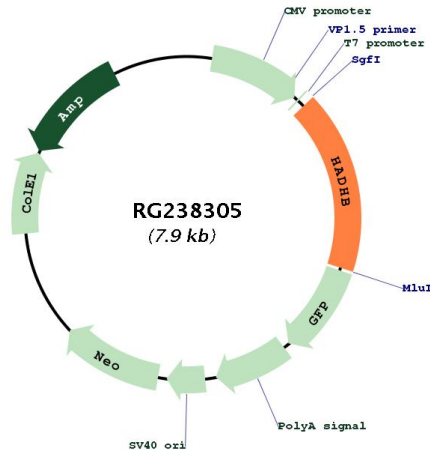
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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_001281513

**ORF Size:** 1356 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).

**RefSeq:** [NM\\_001281513.2](#)

**RefSeq Size:** 2279 bp

**RefSeq ORF:** 1359 bp

**Locus ID:** 3032

**UniProt ID:** [P55084](#)

**Cytogenetics:** 2p23.3

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

**MW:** 49.3 kDa

**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]