

## Product datasheet for **SC100318**

### HIBADH (NM\_152740) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HIBADH (NM_152740) Human Untagged Clone
Tag:	Tag Free
Symbol:	HIBADH
Synonyms:	NS5ATP1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC100318 sequence for NM_152740 edited (data generated by NextGen Sequencing)

```
ATGGCAGCCTCCTTACGGCTCCTCGGAGCTGCCTCCGGTCTCCGGTACTGGAGCCGGCGG
CTGCGGCCGGCAGCCGGCAGCTTTGCAGCGGTGTGTTCTAGGTCACTGGCTTCAAAGACT
CCAGTTGGATTCACTGGACTGGGCAACATGGGAATCCAATGGCAAAAAATCTCATGAAA
CATGGCTATCCACTTATTATTTATGATGTGTTCCCTGATGCCTGCAAAGAGTTTCAAGAT
GCAGGTGAACAGGTAGTATCTTCCCAGCAGATGTTGCTGAAAAAGCTGACAGAATTATT
ACAATGCTGCCACCAGTATCAATGCAATAGAAGCTTATCCGGAGCAAATGGGATTCTA
AAAAAAGTGAAGAAGGGCTCATTATTAATAGATTCCAGCACTATTGATCCTGCAGTTTCA
AAAGAATTGGCCAAAGAAGTTGAGAAAAATGGGAGCAGTTTTTCATGGATGCCCTGTTTCT
GGTGGTGTAGGAGCTGCACGATCTGGGAACCTCACGTTTATGGTGGGAGGAGTTGAAGAT
GAATTTGCTGCTGCCCAAGAGTTGCTGGGTGCATGGGCTCCAACGTGGTGTACTGTGGA
GCTGTTGGGACTGGCAGCGGCAAGATCTGCAACAACATGCTGTTAGCTATTAGTATG
ATTGAACTGCTGAAGCTATGAATCTTGAATCAGGTTAGGGCTTACCCAAAACACTG
GCTAAAACTCTAAATATGAGCTCAGGACGGTGTGGTCAAGTGACACTTATAATCCTGTA
CCTGGAGTGATGGATGGCGTTCCTCGGTAATAACTATCAGGGTGGATTTGGAACAACA
CTCATGGTAAGGATCTGGGATTGGCACAAGACTCTGCTACCAGCACAAAGAGCCCAATC
TTCTTTGGCAGTCTGGCCATCAGATCTACAGGATGATGTGTGCAAAAGGGCTACTCAAAG
AAAGACTTCTCATCCGTGTTCCAGTTCCTACGAGAGGAGGAGACCTTCTGA
```

Clone variation with respect to NM\_152740.3



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_152740 unedited  
 ACAATTTGTATACGACTCACTATAGGGCGGCCGGAATTCGCACGAGGCGCGCCCTTC  
 TCCGTGGGCGAGCCAGCCAGTCCCGCTGCACACGCTCGCAGTCTGTGGGCCCTCCGGGAG  
 GCGGCGGAGGTACCCGCGGGGAGAGGGGCGGGCGCAGCATGGCAGCCTCCTTACGGCTCC  
 TCGGAGCTGCCTCCGGTCTCCGGTACTGGAGCCGGCGGCTGCGGCCGGCAGCCGGCAGCT  
 TTGCAGCGGTGTGTTCTAGTTCAGTGGCTTCAAAGACTCCAGTTGGATTCAATTGGATGG  
 GCAACATGGGGAATCCAATGGCAAAAAATCTCATGAAACATGGCTATCCACTTATTATTT  
 ATGATGTGTTCCCTGATGCCTGCAAAAGAGTTTCAAGATGCAGGTGAACAGGTAGTATCTT  
 CCCCAGCAGATGTTGCTGAAAAAGCTGACAGAATTATTACAATGTGCCACCAGTATCA  
 ATGCAATAGAAGCTTATCCGGAGCAAATGGGATTCTAAAAAAGTGAAGAAGGGCTCAT  
 TATTAATAGATCCAGCACTATTGATCCTGCAGTTTCAAAGAATTGGCCAAAGAAGTTG  
 AGAAAAATGGGAGCAGTTTTTCATGGATGCCCTGTTTCTGGTGGTGTAGGAGCTGCACGAT  
 CTGGGAACCTCACGTTTATGGTGGGAGGAGTTGAAGATGAATTTGCTGCTGCCAAGAGT  
 TGCTGGGTGCATGGGCTCCAACGTGGTGTACTGTGGAGCTGTTGGGACTGGGCANGCGG  
 CANAGATCTGCAACACATGCTGNTAGCTATTAGTATGATTGGAAGTCTGAAGCTATGAT  
 CTGGAATCANGTTAGGCTGACCCAACTACTGGCTAAATCCTAATATGAGCTCNNGACGT  
 GTGGTCAGTGACACTATATNCTGTACTGNATGATGGATGGCGTCTCGCTATACTATAGG  
 TGGGATTGACACCTCAGNCTAGACTGGATN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_152740 unedited  
 NAATTTAGCTATGNACCGGCCCGCATNCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTACCAGTATAGAAATTTATTTGAATCAAATAATATGGCTATATTTATAATAATA  
 TAATAATTATCTAAAGCAAATATCATCATTGGCTCTGAAATGCGTCTAAAGATGCATTC  
 TTAAGTCAAAAAATACGTAGTAAGAATGTACAAGAAAGAAAAAATATAAAAACAAGTCT  
 GCTGAGTGTCCGGAGTTGGTGAAGGATATCCTACCATATTGTGACGGAGTCCAAATAGAA  
 AACATGCAGCAACAGTTCTCCTGCTTATCAGCTCCCTGGAAAATAAACCAGTAACCCTG  
 GTAGTGCAGTAACCATTTGGTTAACAGGACAACTTCTGATGGACACAGATAGTAATTC  
 ACTGCATTTCCCTTCTCTAACTTCTCTTTCACACCAATTCCTTTTCTTCTTTAAGAT  
 GGGTTTCACTCTGTTGACAAAAGATTTGGTTTTATTTGTAAGTAAAGCAGATAATATCC  
 TGATTGAAGTATTCAATGATTTAGTTGAGGATGCTTGGGGATCAAACCTTTGTAAGAAAGGT  
 CAATTAAGCTAGTTAGCAGAGACTATCAGTGGCTTGCAGAAAAAATTCGGATAATATG  
 TTTGTTAAAAAGACAAAAAGAATAAGCGGTGAAAAATCCTAGGGATTACTGTGACCTAGA  
 CAATCAAAAGCAGATAGGTGACCTTTGATTAAATCCATTTNACTTGTGGAGTGAGCTAAA  
 AGGAGGCTCCAAGACAGAGTTTGGTTCCCAACAGTGTCCGTGGCCAAAGGGCACACTCAG  
 AAAGGTCTCTCTNCGTAGACTGGNACACGATGAGAAGTCTTCTTGAGTAGCCTTT  
 GCACACTCATCTGTAGATCTGATGGGCCNAC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_152740

**Insert Size:**

2000 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_152740.2](#), [NP\\_689953.1](#)

**RefSeq Size:** 2006 bp

**RefSeq ORF:** 1011 bp

**Locus ID:** 11112

**UniProt ID:** [P31937](#)

**Cytogenetics:** 7p15.2

**Domains:** NAD\_binding\_2

**Protein Pathways:** Metabolic pathways, Valine, leucine and isoleucine degradation

**Gene Summary:** This gene encodes a mitochondrial 3-hydroxyisobutyrate dehydrogenase enzyme. The encoded protein plays a critical role in the catabolism of L-valine by catalyzing the oxidation of 3-hydroxyisobutyrate to methylmalonate semialdehyde. [provided by RefSeq, Nov 2011]