

## Product datasheet for RC209814

### HIBCH (NM\_014362) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HIBCH (NM_014362) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HIBCH
Synonyms:	HIBYLCOAH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209814 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGCAGCGGAGATGTGGAGGCTCATGTCGAGGTTTAAATGCATTCAAAGGACTAATACCATACTGC  
ACCATTTGAGAATGTCCAAGCACACAGATGCAGCAGAAGAGGTGCTATTGGGAAAAAAGGTTGCACGGG  
AGTCATAACACTAAACAGACCAAAGTTCCTCAATGCAGTACTCTTAATATGATTCGGCAGATTTATCCA  
CAGCTAAAGAAGTGGGAACAAGATCCTGAACTTTCCTGATCATTATAAAGGGAGCAGGAGGAAAGGCTT  
TCTGTGCCGGGGTGATATCAGAGTGATCTCGGAAGCTGAAAAGGCAAAACAGAAGATAGCTCCAGTTTT  
CTTCAGAGAAGAATATATGCTGAATAATGCTGTTGGTTCTTGCCAGAAACCTTATGTTGCACTTATTCAT  
GGAATTACAATGGGTGGGGAGTTGGTCTCTCAGTCCATGGGCAATTCGAGTGGCTACAGAAAAGTGTC  
TTTTTGCTATGCCAGAACTGCAATAGGACTGTTCCCTGATGTGGGTGGAGGTTATTTCTTGCCACGACT  
CCAAGGAAAACCTGGTTACTTCCCTTGCAATTAACAGGATTCAGACTAAAAGGAAGAGATGTGTACAGAGCA  
GGAATTGCTACACACTTTGTAGATTCTGAAAAGTTGGCCATGTTAGAGGAAGATTTGTTAGCCTTGAAT  
CTCCTTCAAAGAAAATATTGCATCTGTCTTAGAAAATACCATACAGAGTCTAAGATTGATCGAGACAA  
GTCTTTTATACTTGAGGAACACATGGACAAAATAAACAGTTGTTTTTCAGCCAATACTGTGGAAGAAAT  
ATTGAAAACCTTACAGCAAGATGGTTCATCTTTTGCCTAGAGCAATTGAAGTAATTAATAAAATGTCTC  
CAACATCTCTAAAGATCACACTAAGGCAACTCATGGAGGGTCTTCAAAGACCTTGAAGAAGTACTAAC  
TATGGAGTATCGGCTAAGTCAAGCTTGTATGAGAGGTCATGACTTTCATGAAGGCGTTAGAGCTGTTTTA  
ATTGATAAAGACCAGAGTCCAAAATGGAACCAGCTGATCTAAAAGAAGTACTGAGGAAGATTTGAATA  
ATCACTTTAAGTCTTTGGGAAGCAGTGATTTGAAATTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC209814 protein sequence  
Red=Cloning site Green=Tags(s)

MGQREMWRMSRFNAFKRTNTILHHLRMSKHTDAAEEVLLGKKGCTGVITLNRPKFLNALTLNMIRQIYP  
 QLKKWEQDPETFLIIIKGAGGKAF CAGGDIRVISEAEKAKQKIAPVFFREEYMLNNAVGCQKPYVALIH  
 GITMGGVGLSVHGQFRVATEKCLFAMPETAIGLFPDVGGGYFLPRLQGLGYFLALTGFRLKGRDVYRA  
 GIATHFVDSEKLAMLEEDLLALKSPSKENIASVLENYHTESKIDRDKSF ILEEHMDKINSCFSANTVEEI  
 IENLQQDGSSFALQLKVINKMSPTSLKII TLRLQ LMEGSSKTLQEVLTMEYRLSQACMRGHDFHEGVRVL  
 IDKDQSPKWKPADLKEVTEEDLNNHFKSLGSSDLKF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6147\\_c07.zip](https://cdn.origene.com/chromatograms/mk6147_c07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_014362

**ORF Size:** 1158 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\\_014362.4](#)

**RefSeq Size:** 1958 bp

**RefSeq ORF:** 1161 bp

**Locus ID:** 26275

**UniProt ID:** [Q6NVY1](#)

**Cytogenetics:** 2q32.2

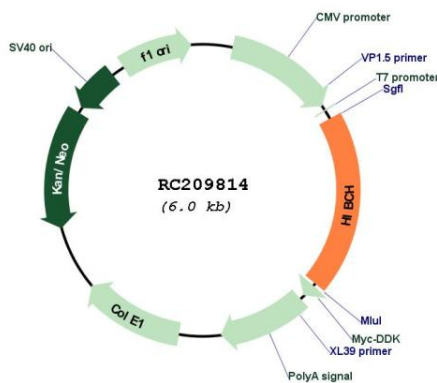
**Domains:** ECH

**Protein Pathways:** beta-Alanine metabolism, Metabolic pathways, Propanoate metabolism, Valine, leucine and isoleucine degradation

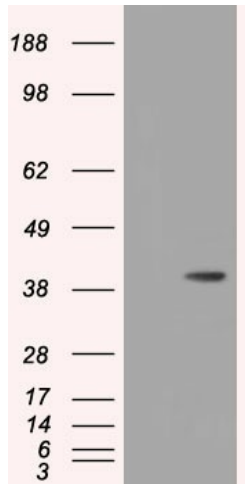
**MW:** 43.4 kDa

**Gene Summary:** This gene encodes the enzyme responsible for hydrolysis of both HIBYL-CoA and beta-hydroxypropionyl-CoA. Mutations in this gene have been associated with 3-hydroxyisobutyryl-CoA hydrolase deficiency. Alternative splicing results in multiple transcript variants.[provided by RefSeq, May 2010]

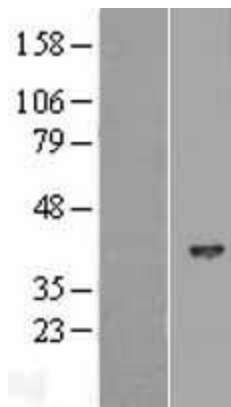
**Product images:**



Circular map for RC209814



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HIBCH (Cat# RC209814, 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-HIBCH (Cat# [TA501317]). Positive lysates [LY402324] (100ug) and [LC402324] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402324]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209814 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HIBCH protein (Cat# [TP309814]). The protein was produced from HEK293T cells transfected with HIBCH cDNA clone (Cat# RC209814) using MegaTran 2.0 (Cat# [TT210002]).