

Product datasheet for **SC309874**

ACACB (NM_001093) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: ACACB (NM_001093) Human Untagged Clone
Tag: Tag Free
Symbol: ACACB
Synonyms: ACC-beta; ACC2; ACCB; HACC275
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001093 edited
GGCACCAGCCCCAGTGACGATTTTCTGAATGGTCTTGCTCTTTGTCTATCTTGCTGAT
TTTCTCCTGTCTGACCTTTTCTGGTTAAAAATCTGGGGAAAAATGACGGACTCCAAGCC
GATCACCAAGAGTAAATCAGAAGCAAACCTCATCCCGAGCCAGGAGCCCTTTCCAGCCTC
TGATAACTCAGGGGAGACACCGCAGAGAAATGGGGAGGGCCACACTCTGCCAAGACACC
CAGCCAGGCCGAGCCAGCCTCCACAAAGGCCCAAGATGCCGGTCGGCGGAGAAACTC
CCTACCACCTCCACCAGAAGCCCCAAGAAACCCCTTTCTCCAGTGACGCAGCACC
CTCCCCAGAGCTCAAGCCAACGGGACTGGGACACAAGGTCTGGAGGCCACAGATACAA
TGGCCTGTCTCCTCAGCCAGGCCCCAGGGCCAGCAAGCTGGCTCCCCCTCAAAGAAGA
CAAGAAGCAGGCAACATCAAGAGGCAGCTGATACCAACTTCATCCTGGGCTCTTTTGA
TGACTACTCCTCCGACGAGGACTCTGTTGCTGGCTCATCTCGTGAGTCTACCCGGAAGGG
CAGCCGGGCCAGCTTGGGGGCCCTGTCCCTGGAGGCTTATCTGACCACAGGTGAAGCTGA
GACCCCGCTCCCACTATGAGGCCGAGCATGTCCGGACTCCACCTGGTGAAGAGGGGACG
GGAACACAAGAAGCTGGACCTGCACAGAGACTTTACCGTGGCTTCTCCCGCTGAGTTTGT
CACACGCTTTGGGGGGATCGGGTCATCGAGAAGGTGCTATTGCCAACACGGGATTGC
CGCTGTGAAGTGCATGCGCTCCATCCGCAGGTGGGCTATGAGATGTTCCGCAACGAGCG
GGCCATCCGGTTTGTGTGATGGTGACCCCGAGGACCTTAAGGCCAACGCAGAGTACAT
CAAGATGGCGGATCATTACGTCCCGTCCAGGAGGGCCCAATAACAACAATATGCCAA
CGTGGAGCTGATTGTGGACATTGCCAAGAGAATCCCGTGCAGGCGGTGTGGGCTGGCTG
GGCCATGCTTTCAGAAAACCTAAACTTCCGGAGCTGCTGTGCAAGAATGGAGTTGCTTT
CTTAGGCCCTCCAGTGAGGCCATGTGGGCCTTAGGAGATAAGATCGCCTCCACCCTTGT
CGCCAGACGCTACAGGTCCAACCCTGCCCTGGAGTGGAAGCGGCTGACAGTGGAGTG
GACAGAAGATGATCTGCAGCAGGAAAAAGAATCAGTGTCCAGAAGATGTTTATGACAA
GGGTTGCGTGAAAGACGTAGATGAGGGCTTGGAGGCAGCAAAAAGAAATGGTTTTCCATT
GATGATCAAAGCTTCTGAAGGTGGCGGAGGGAAGGGAATCCGGAAGGCTGAGAGTGCGGA
GGACTTCCCGATCTTTTTCAGACAAGTACAGAGTGAGATCCAGGCTCGCCATCTTTCT
CATGAAGCTGGCCAGCAGCCCGTCACCTGGAAGTTCAGATCCTCGCTGACCAGTATGG



[View online »](#)

GAATGCTGTGCTCTGTTTGGTCGCGACTGCTCCATCCAGCGGGCCATCAGAAGATCGT
 TGAGGAAGCACCAGCCACCATCGCCCCGCTGGCCATATTCGAGTTCATGGAGCAGTGTGC
 CATCCGCCTGGCCAAGACCGTGGGCTATGTGAGTGCAGGGACAGTGAATACCTCTATAG
 TCAGGATGGCAGCTTCCACTTCTGGAGCTGAATCCTCGCTTGCAGGTGGAACATCCCTG
 CACAGAAATGATTGCTGACGTTAATCTGCCGGCCGCCAGCTACAGATCGCCATGGGCGT
 GCCACTGCACCGGCTGAAGGATATCCGGCTTCTGTATGGAGAGTACCATGGGGAGTGAC
 TCCACTTCTTTTTGAAACCCCTCAAACCCTCCCCTCGCCGAGGCCACGTCATTGCCAC
 CAGAATCACCAGCGAAAACCCAGACGAGGGTTTTAAGCCGAGCTCCGGGACTGTCCAGGA
 ACTGAATTTCCGAGCAGCAAGAACGTGTGGGGTTACTTCAGCGTGGCCGCTACTGGAGG
 CCTGCACGAGTTTGGGATTCCCAATTTGGGCACTGCTTCTCCTGGGAGAGAACCAGGA
 AGAGGCCATTTGAAACATGGTGGTGGCTTTGAAGGAACTGTCCATCCGAGGCGACTTTAG
 GACTACCGTGAATACCTCATTAACTCCTGGAGACCGAGAGCTTCCAGAAACAACGACAT
 CGACACCGGGTGGTTGGACTACCTCATTGCTGAGAAAGTGCAGGCGGAGAAAACCGATAT
 CATGCTTGGGGTGGTATCGGGGCCCTTGAACGTGGCCGATGCGATGTTCCAGAACGTGCAT
 GACAGATTTCTTACACTCCCTGAAAGGGGCCAGGTCCTCCAGCGGATTCACTACTGAA
 CCTCGTAGATGTGAATTAATTTACGGAGGTGTTAAGTACATTCTCAAGGTGGCCCGGCA
 GTCTCTGACCATGTTCTGTTCTCATCATGAATGGCTGCCACATCGAGATTGATGCCACCG
 GCTGAATGATGGGGGCTCCTGCTCTCCTACAATGGGAACAGCTACACCACCTACATGAA
 GGAAGAGGTTGACAGTTACCGAATTACCATCGGCAATAAGACGTGTGTGTTGAGAAGGA
 GAACGATCCTACAGTCTGAGATCCCCCTCGGCTGGGAAGCTGACACAGTACACAGTGA
 GGATGGGGGCCACGTTGAGGCTGGGAGCAGCTACGCTGAGATGGAGGTGATGAAGATGAT
 CATGACCCTGAACGTTGAGGAAAGAGGCCGGGTGAAGTACATCAAGCGTCCAGGTGCCGT
 GCTGGAAGCAGGCTGCGTGGTGGCCAGGCTGGAGCTCGATGACCCTTCTAAAGTCCACCC
 GGCTGAAACCGTTACAGGAGAACCTCCCTGCCAGCAGACTGCCCATCTCGGAGAGAA
 ACTGCACCAGGCTTCCACAGCGTCTGAAAACCTCACCAACGTCATGAGTGGCTTTTG
 TCTGCCAGAGCCCGTTTTAGCATAAAGCTGAAGGAGTGGGTGCAGAAGCTCATGATGAC
 CCTCCGGCACCCGCTACTGCCGCTGCTGGAGCTGCAGGAGATCATGACCAGCGTGGCAGG
 CCGCATCCCCGCCCTGTGGAGAAGTCTGTCCGAGGGTATGGCCAGTATGCCAGCAA
 CATCACCTCGGTGCTGTGCCAGTCCCCAGCCAGCAGATAGCCACCATCCTGGACTGCCA
 TGCAGCCACCCTGCAGCGGAAGGCTGATCGAGAGGTCTTCTTCAACACCCAGAGCAT
 CGTGCAGTTGGTCCAGAGATACCGCAGCGGGATCCGCGGCTATATGAAAACAGTGGTGT
 GGATCTCCTGAGAAGATACTTGGCTGTTGAGCACCATTTTCAGCAAGCCACTACGACAA
 GTGTGTGATAAACCTCAGGGAGCAGTTCAGCCAGACATGTCCCAGGTGCTGGACTGCAT
 CTTCTCCACGCACAGGTGGCCAAGAAGAACCAGCTGGTATCATGTTGATCGATGAGCT
 GTGTGGCCAGACCCCTTCCCTGTCCGACGAGCTGATCTCCATCCTCAACGAGCTCACTCA
 GCTGAGCAAAAAGCAGCACTGCAAAGTGGCCCTCAGAGCCCGGCAGATCCTGATTGCCTC
 CCACCTCCCCTCCTACGAGCTGCCGCATAACCAGGTGGAGTCCATTTTCTGTCTGCCAT
 TGACATGTACGGCCACCAGTTCTGCCCGAGAACCTCAAGAAATTAATACTTTCCGAAAC
 AACCATTTGACGTCCCTGCCTACTTTCTTCTATCACGCAAAACAAGTCGTGTGCATGGC
 GTCCTTGAGGTTTACGTGCGGAGGGGCTACATCGCCTATGAGTTAAACAGCCTGCAGCA
 CCGGCAGCTCCCGACGGCACCTGCGTGGTAGAATTCAGTTCATGCTGCCGCTCCTCCCA
 CCCAAACCGGATGACCGTGGCCATCAGCATCACCAACCCTGACCTGCTGAGGCACAGCAC
 AGAGCTTTCATGGACAGCGGCTTCTCCCACTGTGCCAGCGCATGGGAGCCATGGTAGC
 CTTCAGGAGATTCGAGGACTTACCAGAAATTTGATGAAGTCATCTTGTCTCGCCAA
 CGTGCCCAAAGACACCCCTTCTCAGCGAGGCCCGCACCTCCCTATACTCCGAGGATGA
 CTGCAAGAGCCTCAGAGAAGAGCCCATCCACATTTCTGAATGTGTCCATCCAGTGTGCAGA
 CCACCTGGAGGATGAGGCACTGGTGCCGATTTTACGGACATTCGTACAGTCCAAGAAAAA
 TATCCTTGTGATTATGGAATCCGACGAATCACATTTCTGATTGCCAAGAGAAAGAATT
 TCCCAAGTTTTTACATTCAGAGCAAGAGATGAGTTTGCAGAAGATCGCATTTACCGTCA
 CTTGGAACCTGCCTGGCCTTCCAGCTGGAACCTAACCAGGATGCGTAACCTCGATCTGAC
 CGCCGTGCCCTGTGCCAACCACAAGATGCACCTTTACCTGGGTGCTGCCAAGGTGAAGGA
 AGGTGTGGAAGTGACGGACCATAGGTTCTTATCCGCGCCATCATCAGGCACTCTGACCT

GATCACAAAGGAAGCCTCCTTCGAATACCTGCAGAACGAGGGTGAGCGGCTGCTCCTGGA
 GGCCATGGACGAGCTGGAGGTGGCGTTCAATAACACCAGCGTGCCGACCGACTGCAACCA
 CATCTTCTCAACTTCGTGCCACTGTCATCATGGACCCCTTCAAGATCGAGGAGTCCGT
 GCGCTACATGGTTATGCGCTACGGCAGCCGGCTGTGAAACTCCGTGTGTACAGGCTGA
 GGTCAAGATCAACATCCGCCAGACCACCACCGCAGTGCCGTTCCCATCCGCCTGTTTAT
 CACCAATGAGTCGGGCTACTACCTGGACATCAGCCTCTACAAAGAAGTGACTGACTCCAG
 ATCTGGAATATCATGTTTCACTCCTTCGGCAACAAGCAAGGGCCCGACGCGGATGCT
 GATCAATACTCCCTACGTACCAAGGATCTGCTCCAGGCCAAGCGATTCCAGGCCAGAC
 CCTGGGAACACCTACATCTATGACTTCCCGGAAATGTTAGGCAGGCTCTCTTTAAACT
 GTGGGGCTCCCCAGACAAGTATCCCAAAGACATCCTGACATACACTGAATTAGTGTGGA
 CTCTCAGGGCCAGCTGGTGGAGATGAACCGACTTCTGGTGGAAATGAGGTGGGCATGGT
 GGCCTTAAAAATGAGGTTAAGACCCAGGAGTACCCGGAAGGACGGGATGTGATCGTCAT
 CGGCAATGACATCACCTTTCGATTGGATCCTTTGGCCCTGGAGAGGACCTTCTGTACCT
 GCGGGCATCCGAGATGGCCCGGCAGAGGGCATTCCCAAATTTACGTGGCAGCCAACAG
 TGCGCCCGTATTGGCATGGCAGAGGAGATCAAACACATGTTCCACGTGGCTTGGGTGGA
 CCCAGAAGACCCCAAAAGGATTTAAATACCTGTACCTGACTCCCAAGACTACACCAG
 AATCAGCTCCCTGAACTCCGTCCACTGTAACACATCGAGGAAGGAGGAGTCCAGATA
 CATGATCACGGATATCATCGGAAGGATGATGGCTTGGCGTGGAGAATCTGAGGGGCTC
 AGGCATGATTGCTGGGGAGTCTCTCTGGCTTACGAAGAGATCGTACCATTAGCTTGGT
 GACCTGCCGAGCCATTGGGATTGGGGCTACTTGGTGGAGCTGGGCCAGCGAGTATCCA
 GGTGGAGAATCCACATCATCTCACAGGAGCAAGTGTCTCAACAAGTCTGGGAAG
 AGAGGTACACATCCAACAACAGCTGGGTGGCGTTCAGATCATGCATTACAATGGTGT
 TCCCCACATCACCGTGCCAGATGACTTTGAGGGGTTTATACCATCTGGAGTGGCTGTC
 CTATATGCCAAAAGGATAATCACAGCCCTGTCCCTATCATCACACCCACTGACCCATTGA
 CAGAGAAATTGAATTCCTCCCATCCAGAGCTCCCTACGACCCCGGTGGATGCTTGCAGG
 AAGGCCTACCCAACTCTGAAGGGAACGTGGCAGAGCGGATTCTTTGACCATGGCAGTTT
 CAAGGAAATCATGGCACCTGGGCGCAGACCGTGGTGACAGGACGAGCAAGGCTTGGGGG
 GATTCCCGTGGGAGTGATTGCTGTGGAGACACGGACTGTGGAGGTGGCAGTCCCTGCAGA
 CCCTGCCAACCTGGATTCTGAGGCCAAGATAATTACGAGGCAGGACAGGTGTGGTTCCC
 AGACTCAGCTACAAAACCGCCAGGCCATCAAGGACTTCAACCGGAGAAAGTTGCCCT
 GATGATCTTTGCCAACTGGAGGGGTTCTCCGGTGGCATGAAAGACATGTATGACCAGGT
 GCTGAAGTTTGGAGCCTACATCGTGGACGGCCTTAGACAATACAAACAGCCCATCCTGAT
 CTATATCCCGCCCTATGCGGAGCTCCGGGGAGGCTCCTGGGTGGTCATAGATGCCACCAT
 CAACCCGCTGTGCATAGAAATGTATGCAGACAAAGAGAGCAGGGGTGGTGTCTGGAACC
 AGAGGGGACAGTGGAGATTAAGTTCCGAAAGAAAGATCTGATAAAGTCCATGAGAAGGAT
 CGATCCAGCTTACAAGAAGCTCATGGAACAGCTAGGGGAACCTGATCTCTCCGACAAGGA
 CCGAAAGGACCTGGAGGGCCGGCTAAAGGCTCGCGAGGACCTGTCTGCTCCCCATACCA
 CCAGGTGGCGGTGCAGTTCGCGACTTCCATGACACACCCGCGCGATGCTGGAGAAGGG
 CGTCATATCTGACATCCTGGAGTGGAAAGACCGCACGACCTTCTGTATTGGCGTCTGCG
 CCGCCTCCTCCTGGAGGACCAGGTCAAGCAGGAGATCCTGCAGGCCAGCGGGGAGCTGAG
 TCACGTGCATATCCAGTCCATGTGCGTGTGTTTCTGGAGACGGAGGGGGCTGTCAA
 GGCTACTTGTGGGACAACAACCAGGTGGTGTGTCAGTGGCTGGAACAGCACTGGCAGGC
 AGGGGATGGCCCGCGCTCCACCATCCGTGAGAACATCACGTACCTGAAGCAGACTCTGT
 CCTCAAGACCATCCGAGGCTGGTTGAAGAAAACCCGAGGTGGCGTGGACTGTGTGAT
 ATACCTGAGCCAGCACATCAGCCCAGCTGAGCGGGCGCAGGTGTTTACCTGCTGTCTAC
 CATGGACAGCCCGCCTCCACCTGACCGTGGCCCGCCAGCCACTCCCGGGACCACGGCA
 AAAGGAACCCAGACCACCACCCGTACACCCTCAGCAGACCTGAAGACTTGCTTTT
 AAACAAAGAAAATCCTGGGCACCTTCTGCAGGGCTGCTGGTTCAGACTGACACCCGCTT
 AATAAAAGGCCAGGAGTG

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001093 unedited NAGTCAGATTTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACCAGCCCCAGTGA CGATTTTCTGAATGGTCTTGCTTCTTTGTCTATCTTGTCTGATTTTCTCCTGTCTGACCT TTTCTGGTTAAAAATCTGGGGGAAAAATGACGGACTCCAAGCCGATCACCAAGAGTAAAT CAGAAGCAAACCTCATCCCGAGCCAGGAGCCCTTCCAGCCTCTGATAACTCAGGGGAGA CACCGCAGAGAAAATGGGGAGGGCCACACTCTGCCAAGACACCCAGCCAGGCCGAGCCAG CCTCCCACAAAGGCCCCAAAGATGCCGGTCGGCGGAGAAAATCCCTACCACCTCCACCC AGAAGCCCCCAAGAAACCCCTTTCTTCCAGTGACGCAGCACCCCTCCCCAGAGCTTCAAG CCAACGGGACTGGGACACAAGGTCTGGAGGCCACAGATACCAATGGCCTGTCTCCTCAG CCAGGCCCCAGGGCCAGCAAGCTGGCTCCCCCTCAAAGAAGACAAGAAGCAGGCAAAACA TCAAGAGGCAGCTGATGACCAACTTCATCTGGGCTCTTTTGATGACTACTCCTCCGACG AGGACTCTGTTGCTGGCTCATCTCGTGAGTCTACCCGGAAGGGCAGCCGGGCCAGCTTGG GGGCCCTGTCCCTGGAGGCTTACTGACCACAGGTGAAGCTGAGACCCCGTCCCCACTA TGAGGCCGAGCATGTCGGGACTCCACCTGGTGAAGAGGGGACGGGAACACAAGAAGCTGG ACCTGCACAGAGACTTTACCGTGGCTTCTCCCGCTGAGTTTGTACACGCTTTGGGGGGG GATCGGTTCATCGAGAAGGTGCTTATTGCCACACACGGGATGCCGCTGTGAAGTCATGCC CNTCATCCG</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001093 unedited NCCCACATCGGNGATGGCACTTNCAGGNCCAGGNGAAAGNCACTGGGNGNAGGGGTC ACAGGGNATGCCACCCGGGNATCGTTCAGAAACAGCTATGACCCGGCCGCAATCTAGAG TCGAGTT TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGGGGGAAAAAGCCCCCGGCCCTTAA AAAACGGGGGGGAACCCGGAACCCACACCCCGAAAAAGGCCCAAGAATTTCTTTGGTA AAAAACAATCCTCAGGGGCCCGAGGGGGACCGGGGGGGGGCCGGGGGGTCCCTT TGCCCGGGGCCCGGGGGGGGGGGGGGGGGCCCGGCAAGGGGGGGCCGGGCCGCCCTG GGAAACAACAGGGGAAAAACCCGGGCCCCCAATGGGCCGAAGGGCCGGCCCAAGGAA AAAAAAAAGGCCCGGGCCCGGGGGTTTCTTCAACCACGCCCGGAAGGGCTGAGG ACAAAAACCTGCCTCAAGGACTGAAGTCCCACGGGGGGGGGGGGGGGGCCATCCCCG GGCTGGCAGGGGGGTCCAACCACCGACAACCCCGGTTGGTGGCCACAAGTAGGGC TTGAAAGCCCCCTCCGTCTCCAAAAACAACGACCAACATGGGACTGGGAATGCACGGG ACTCAACTCCCCGTGGCCGGAGGGACCCCGCTGGACCGGGCTCCAGAAGGGGGCGG CCCAAAACCAATACGGGAAGGGGGGGGGGGCTCCCTCCCGAGGGCAGAAAAGGAG CCCTTTTCAGAATCCCGCCGGGGGGGTTCATGAAAATTGGGAAACGGCCCCCCCCCTGG GGGG</p>
Restriction Sites:	Please inquire
ACCN:	NM_001093
Insert Size:	7600 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).
OTI Annotation:	There is 2 nucleotide difference between the OriGene clone and the NCBI reference ORF. These result in the substitution of 2 aa.
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:	<ol style="list-style-type: none">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:	<u>NM_001093.2</u> , <u>NP_001084.2</u>
RefSeq Size:	9251 bp
RefSeq ORF:	7377 bp
Locus ID:	32
UniProt ID:	<u>O00763</u>
Cytogenetics:	12q24.11
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Adipocytokine signaling pathway, Fatty acid biosynthesis, Insulin signaling pathway, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism
Gene Summary:	Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. ACC-beta is thought to control fatty acid oxidation by means of the ability of malonyl-CoA to inhibit carnitine-palmitoyl-CoA transferase I, the rate-limiting step in fatty acid uptake and oxidation by mitochondria. ACC-beta may be involved in the regulation of fatty acid oxidation, rather than fatty acid biosynthesis. There is evidence for the presence of two ACC-beta isoforms. [provided by RefSeq, Jul 2008]