OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC238154

ACAT2 (NM_001303253) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACAT2 (NM_001303253) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACAT2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC238154 representing NM_001303253 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGGTCGCATCCAGTCCTTCGGATTTGGGGAAATAGAAGGGCTACAGCGGCGTCCCTAGGCCGTTCTG GAGGTCGCCTGTCCAGCCCTCGGCTGCTGCGAGTTGTGGCACCCACCTTGACCTTTGCTCAGACCAGCAG GTGTTCCTTCAATGGTGCCTTAGCTGCTGTTCCTGTCCAGGACCTGGGCTCCACTGTCATCAAAGAAGTC TTGAAGAGGGCCACTGTGGCTCCGGAAGATGTGTCTGAGGTCATCTTTGGACATGTCTTGGCAGCAGGCT GTGGGCAGAATCCTGTTAGACAAGCCAGTGTGGGTGCAGGAATTCCCTACTCTGTTCCAGCATGGAGCTG CCAGATGATCTGTGGGTCAGGCCTAAAAGCTGTGTGCCTTGCAGTCCAGTCAATAGGGATAGGAGACTCC AGCATTGTGGTTGCAGGAGGCATGGAAAATATGAGCAAGGCTCCTCACTTGGCTTACTTGAGAACAGGAG TAAAGATAGGTGAGATGCCACTGACTGACAGTATACTCTGTGATGGTCTTACAGATGCATTTCACAACTG TCATATGGGTATTACAGCTGAAAATGTAGCCAAAAAATGGCAAGTGAGTAGAGAAGATCAGGACAAGGTT GCAGTTCTGTCCCAGAACAGGACAGAGAATGCACAGAAAGCTGGCCATTTTGACAAAGAGATTGTACCAG TTTTGGTGTCAACTAGAAAAGGTCTTATTGAAGTTAAAACAGATGAGTTTCCTCGCCATGGGAGCAACAT AGAAGCCATGTCCAAGCTAAAGCCTTACTTTCTTACTGATGGAACGGGAACAGTCACCCCAGCCAATGCT TCAGGAATAAATGATGGTGCTGCAGCTGTCGTTCTTATGAAGAAGTCAGAAGCTGATAAACGTGGGCTTA CACCTTTAGCACGGATAGTTTCCTGGTCCCAAGTGGGTGTGGAGCCTTCCATTATGGGAATAGGACCAAT TCCAGCCATAAAGCAAGCTGTTACAAAAGCAGGTTGGTCACTGGAAGATGTTGACATATTTGAAATCAAT GAAGCCTTTGCAGCTGTCTCTGCTGCAATAGTTAAAGAACTTGGATTAAACCCAGAGAAGGTCAATATTG AAGGAGGGGCTATAGCCTTGGGCCACCCTCTTGGAGCATCTGGCTGTCGAATTCTTGTGACCCTGTTACA CACACTGGAGAGAATGGGCAGAAGTCGTGGTGTTGCAGCCCTGTGCATTGGGGGTGGGATGGGAATAGCA ATGTGTGTTCAGAGAGAA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

View online »

Protein Sequence:

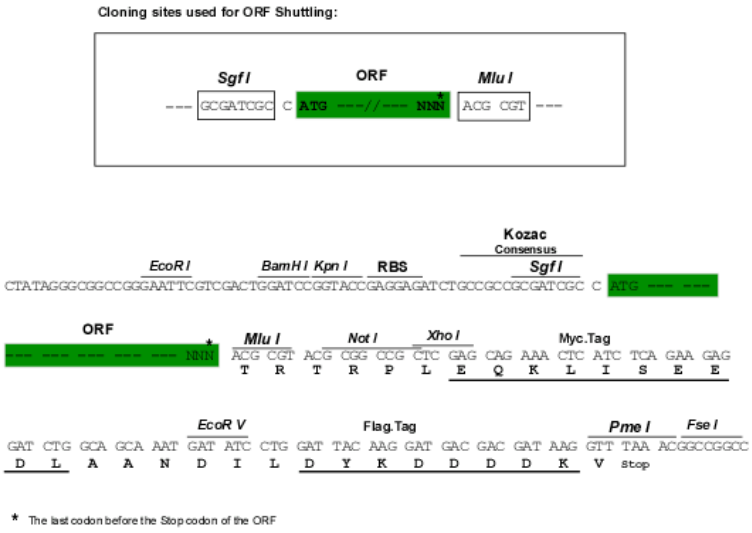
>RC238154 representing NM_001303253
Red=Cloning site Green=Tags(s)

MGSHPVLRIWGNRRATAASLGRSGGRLSSPRLLRVVAPTLTFAQTSRCSFNGALAAVPVQDLGSTVIKEV
LKRATVAPEDVSEVIFGHVLAAGCGQNPVRQASVGAGIPYSVPAWSCQMICGSGLKAVCLAVQSIGIGDS
SIVVAGGMENMSKAPHLAYLRTGVKIGEMPLTDSILCDGLTDAFHNCHMGITAENVAKKWQVSREDQDKV
AVLSQNRTENAQKAGHFDKEIVPVLVSTRKGLIEVKTDEFPRHGSNIEAMSKLKPYFLTDGTGTVTPANA
SGINDGAAAVVLMKKSEADKRGLTPLARIVSWSQVGVEPSIMGIGPIPAIKQAVTKAGWSLEDVDIFEIN
EAFAAVSAAIVKELGLNPEKVNIEGGAIALGHPLGASGCRILVTLLHTLERMGRSRGVAALCIGGGMGIA
MCVQRE

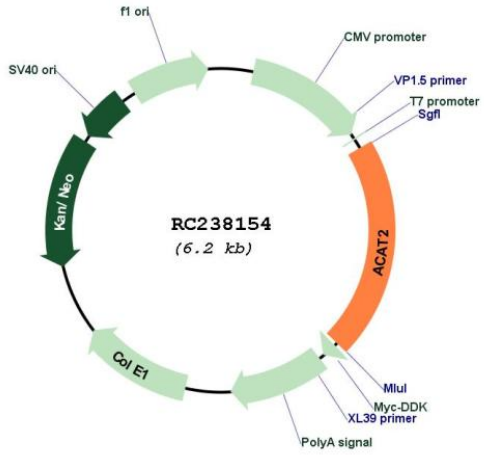
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

ACCN:	NM_001303253
ORF Size:	1278 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_001303253.1, NP_001290182.1
RefSeq Size:	1723 bp
RefSeq ORF:	1281 bp
Locus ID:	39
UniProt ID:	Q9BWD1
Cytogenetics:	6q25.3
Protein Families:	Druggable Genome
Protein Pathways:	Butanoate metabolism, Fatty acid metabolism, Lysine degradation, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism, Synthesis and degradation of ketone bodies, Terpenoid backbone biosynthesis, Tryptophan metabolism, Valine, leucine and isoleucine degradation
MW:	45.1 kDa
Gene Summary:	The product of this gene is an enzyme involved in lipid metabolism, and it encodes cytosolic acetoacetyl-CoA thiolase. This gene shows complementary overlapping with the 3-prime region of the TCP1 gene in both mouse and human. These genes are encoded on opposite strands of DNA, as well as in opposite transcriptional orientation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2014]

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US