

Product datasheet for **RC225705**

C13orf31 (LACC1) (NM_001128303) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C13orf31 (LACC1) (NM_001128303) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C13orf31
Synonyms:	C13orf31; FAMIN; JUVAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC225705 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCAGAAGCTGTTTTGATTGATCTTTTTGGTTGAAATTGAACTCTCAAAAAAAGTCCATCAGACAT
 TACTGAAGACTTTGAATGCTGTCCAATACCACCATGCTGCCAAGGCCAAGTTTCTCTGTATAATGTGTTG
 CAGTAACATCAGCTATGAAAGGGATGGAGAACAAGATAATTGTGAAATAGAAACAAGCAATGGATTATCA
 GCTCTCTTGAAGAATTTGAGATTGTTAGCTGTCCAGCATGGCTGCCACTTTGTATACCATTAACAGA
 AAATTGATGAAAAAATCTGAGCAGCATTAAGGTAATTGTACCCAGGCACAGGAAGACATTAATGAAAGC
 TTTTATTGATCAACTCTCACAGATGTTACAATTTTGAATTTGAAGATTTGCAAGTGACTTTTAGGGGA
 GGGCTTTTTAAACAGTCCATTGAAATAACGTAATCACAGCTCAAGAACTAAGAGGAATTCAGAATGAAA
 TAGAAACATTTTGAAGAAGTCTGCCAGCACTGAGAGGAAAATTAATATTATCATTCTTCTTTGATCCC
 AGATATTTTCATACATGGATTTACTACAAGAACAGGTGGGATATCTTATATACCAACTCTTAGCTCATT
 AATCTCTTCAGTAGTTCCAAACGGAGAGATCCCAAGGTAGTGGTTCAAGAAAATCTGCGTAGGTTGGCGA
 ATGCTGCAGGATTAATGTGGAGAAATTTACCGAATAAAGACTCATCTCCAATGACATCTGGATTAT
 GGGAGAAAGGAGCCTGACTCTTATGATGGAATAACCACAAAACAGAGAGGAGTCAATAGCAGCTCTT
 GGTGCAGACTGTATACCGATAGTTTTTGCAGATCCAGTCAAAAAGCATGTGGGGTTGCTCACGCTGGT
 GGAAAGTACTTTGTTGGGTGTTGCTATGGCTACAGTGAATGCTATGATAGCAGAATATGGCTGCAGTTT
 GGAAGACATTGTTGTTGACTTGGACCTTCAAGTGGACCTTGTGTTTACTCTTCAAGGAATCAGCA
 GAGGCATTTATAATCTTCATCTGCATGTGTACAATTTGATTACCAAAATCCCTGTATCGACATCC
 GTAAAGCCACAAGGATTTCTAGAACAGGGAGGAATTTCCACAGAATATTCAGGACCAGAACCAAGA
 TCTCAACCTCTGTACATCTTGCATCTGACAAGTTTTTCTCCCATGTCCGAGATGGCCTAATTTTGGT
 ACACAGATTGGCTTCATATCAATTAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC225705 protein sequence
 Red=Cloning site Green=Tags(s)

MAEAVLIDLFGLKLNQKNCHQTLKTLNAVQYHHAAKAKFLCIMCCSNISYERDGEQDNCEIETSNGLS
 ALLEEFIEIVSCPSMAATLYTIKQKIDEKNLSSIKVIVPRHRKTLMKAFIDQLFTDVYNFEFEDLQVTRG
 GLFKQSIIEINVITAQELRGIQNEIETFLRSLPALRGKLTIIITSSLIPDIFIHGFTTRTGGISYIPTLSSF
 NLFSSSKRRDPKVVVQENLRRLANAAGFNVEKFYRIKTHHSNDIWIWIMGRKEPDSYDGITTNQRGVTIAAL
 GADCIPIVFADPVKACGVAHAGWKGTLLGVAMATVNAMIAEYGCSELEDIVVVLGPSVGPCCFTLPRESA
 EAFHNLHPACVQLFDSNPNCIDIRKATRILLEQGGILPQNIQDQNDLNLCTSCHPDKFFSHVRDGLNFG
 TQIGFISIKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6338_e10.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

ACCN: NM_001128303

ORF Size: 1290 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

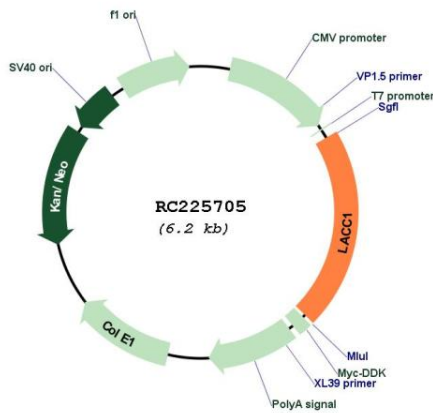
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_001128303.1](#), [NP_001121775.1](#)

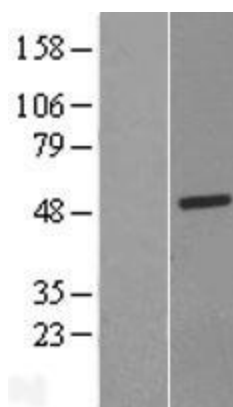
RefSeq Size: 4288 bp
 RefSeq ORF: 1293 bp
 Locus ID: 144811
 UniProt ID: [Q8IV20](#)
 Cytogenetics: 13q14.11
 MW: 47.8 kDa

Gene Summary: This gene encodes an oxidoreductase that promotes fatty-acid oxidation, with concomitant inflammasome activation, mitochondrial and NADPH-oxidase-dependent reactive oxygen species production, and bactericidal activity of macrophages. The encoded protein forms a complex with fatty acid synthase on peroxisomes and is thought to be modulated by peroxisome proliferator-activated receptor signaling events. Naturally occurring mutations in this gene are associated with inflammatory bowel disease, Behcet's disease, leprosy, ulcerative colitis, early-onset Crohn's disease, and systemic juvenile idiopathic arthritis. [provided by RefSeq, Apr 2017]

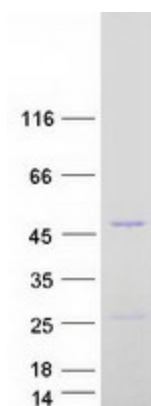
Product images:



Circular map for RC225705



Western blot validation of overexpression lysate (Cat# [LY426942]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225705 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LACC1 protein (Cat# [TP325705]). The protein was produced from HEK293T cells transfected with LACC1 cDNA clone (Cat# RC225705) using MegaTran 2.0 (Cat# [TT210002]).