

Product datasheet for **RC222515**

ACOX3 (NM_003501) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACOX3 (NM_003501) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACOX3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC222515 representing NM_003501
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCATCCACTGTGGAAGGAGGCGACACAGCTCTGCTCCAGAATCCCCAGGGGGCCCTCGATGCCT
 ACCGAGCAAGAGCGTCTTCAGCTGGAAGGAGCTGGCGCTGTTACGGAAGGGGAGGGCATGCTCCGCTT
 TAAGAAAACCATCTTCTCAGCTCTTGAGAAATGACCCCTTTTTTCGCTCGTCCCTGGAGCCGATCTGTCC
 TTGGAGAAGTATCGCGAGCTGAACCTCCTTCGATGCAAGCGGATCTTCGAGTATGACTTCCTCAGTGTCCG
 AAGACATGTTCAAGAGCCCTCTGAAGTCCCGCCTTGATTTCAGTGCCTGGGCATGTATGACTCTTCTCT
 GGCTGCCAAGTACCTCCTCCATAGCTTGGTTTTGGATCAGCAGTTTACAGTTCTGGTCTGAAAGACAT
 CTCACATATTTCAAAGATCTTCAGGATGGAGATTTTTGGATGTTTTGCTCTGACCGAATTAAGCCACG
 GCAGTAATACCAAGGCCATTCGCACAACGCCACTACGATCCTGCCACTGAGGAATTCATACATACATTC
 CCCTGATTTCAAGCTGCCAAGTTTTGGTTGGCAACATGGGCAAGACAGCCACTCACGGGTGGTGT
 GCTAAGCTGTGTGTGCCAGGGGACCAGTCCATGGGCTGCATCCCTTTATCGTGACGATCCGGGACCCGA
 AGACCCCTCTTCCATGCCTGGAGTGATGGTTGGCGACATAGGAAAAAACTCGGGCAGAACGGTCTGGA
 TAATGGTTTCGCCATGTTCCACAAGGTCAGAGTTCCTCGCCAGAGCCTTCTGAACCGGATGGGAGACGTC
 ACCCCCGAGGGCACCTATGTCAGCCCTTTAAGGACGTCAGGCAGCGCTTTGGAGCGTCCCTGGGGAGCC
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 TCGTTTCAGCCACTCGCGTCAGTTTGGACCCACAGAGGAGGAGAAATACCAGTGTGAGTATCCA
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 TCCTGGACCTGGTGGAGCTCCAGCGAGGACTTGCATCGGGAGACCGCAGCGCCAGACAGGCAGAGCTTGG
 ACGTGAGATCCACGCCCTGGCATCGGCCAGCAAGCCCTGGCCTCGTGGACCACCCAGCAAGGAATTCAG
 GAATGCCGGGAGGCGTGTGGAGGACACGGCTATCTGGCCATGAACCGGTTGGGTGTCCTTAGAGATGACA
 ACGATCCCAACTGCACATACGAAGGTGACAACAACATCCTGCTGCAGCAGACAAGCAACTATTTGCTGGG
 TCTCCTGGCACACCAGGTCCACGATGGAGCTTGCCTCCGAGTCCGCTGAAGTCAGTGGACTTTCTGGAC
 GCCTATCCCGGCATCCTTGACCAGAAGTTGAGGTCTCCAGTGTGCGGACTGCTTGACTCTGCAGTCCG
 CCCTGGCAGCATAACAAGTGGCTGGTTTGTACCTGCTCCGAGAGACTTATCAAAAATTAACCAAGAGAA
 AAGATCAGGAAGCAGTGACTTTGAAGCAAGGAACAAATGCCAGGTGTCCACGGCCGTCCGTTGGCGCTG
 GCCTTCGTGGAGCTCACGGTGGTCCAGAGTTCACAGCAGCAGTGCACCAGCCTTCGTTGCCGCCCTCGC
 TCGGGGCCGTGCTGGGGCGGCTCAGTGTCTGTACGCCCTGTGGTCCCTGAGCCGCCACGGGCCCTGCT
 CTACCGAGGAGGATACTTCTCCGGTGAGCAGGCGGGAAGTGTGGAGAGCGCCGTCTGGCTTTGTGT
 TCCCAGCTGAAAGACGATGCAGTTGCCCTGGTAGACGTGATCGCTCCTCCTGACTTTGTTCTGGACTCAC
 CGATTGGCAGAGCCGACGGCGAGCTCTACAAAAACCTCTGGGGCGCTGCTCCTGCAGGAAAGCAAGGTGT
 GGAGCGGGCATCCTGGTGGCCAGAGTTTTCTGTGAACAAACCTGTATAGGAAGTCTGAAATCGAAGCTC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222515 representing NM_003501
Red=Cloning site Green=Tags(s)

MASTVEGGDTALLPEFPRGPLDAYRARASFSWKELALFTEGEGMLRFKKTIFSALENDPLFARSPGADLS
 LEKYRELNFLRCKRIFEYDFLSVEDMFKSPLKVPALIQCLGMYDSSLAAYKYLHLSLVFGSAVYSSGSRH
 LTYIQKIFRMEIFGCFALTELSHGSNTKAIRTTAHDYDPATEEFIIHSPDFEAAKFWVGNMGKTATHAVVF
 AKLCVPGDQCHGLHPFIVQIRDPKTLMPGVMVGDIGKKLGQNGLDNGFAMFHKVRVPRQSLNRMGDV
 TPEGTYVSPFKDVRQRFASLGSLSGRVIVSLAILNLKLAVALRFSATRRQFGPTEEEEIPVLEY
 MQQWRLLPYLAAYVALDHFVSKSLFLDLVELQRGLASGDRSARQAELEGREIHALASASKPLASWTTQQGIQ
 ECREACGGHGYLAMNRLGVLRDDNDPNCTYEGDNNILLQQTSNYLLGLLAQVHDGACFRSPLKSVDFLD
 AYPGILDQKFEVSSVADCLDSAVALAAYKWLVCYLLRETYQKLNQEKRSQSSDFEARNKCQVSHGRPLAL
 AFVELTVVQRFHEHVHQPSVPPSLRAVLGRLSALYALWSLSRHAALLYRGGYFSGEQAGEVLESVLAALC
 SQLKDDAVALVDIAPDFVLDSPIGRADGELYKNLWGAVLQESKVLERASWWPEFSVNKPVIKSLKSL

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6162_a04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003501

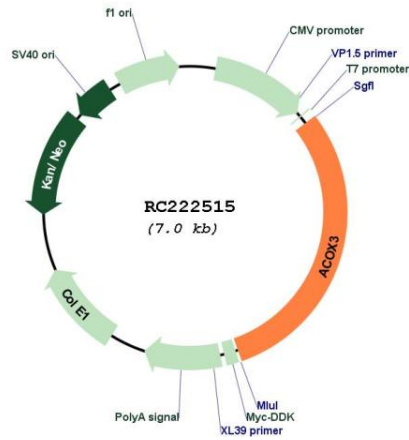
ORF Size: 2100 bp

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](#)

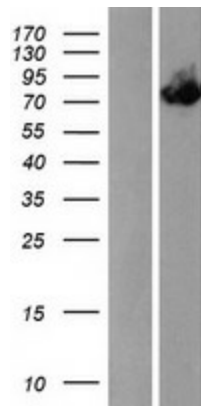
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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:	NM_003501.3
RefSeq Size:	2415 bp
RefSeq ORF:	2103 bp
Locus ID:	8310
UniProt ID:	O15254
Cytogenetics:	4p16.1
Domains:	ACOX, Acyl-CoA_dh
Protein Pathways:	alpha-Linolenic acid metabolism, Biosynthesis of unsaturated fatty acids, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway
MW:	77.4 kDa
Gene Summary:	Acyl-Coenzyme A oxidase 3 also know as pristanoyl -CoA oxidase (ACOX3)is involved in the desaturation of 2-methyl branched fatty acids in peroxisomes. Unlike the rat homolog, the human gene is expressed in very low amounts in liver such that its mRNA was undetectable by routine Northern-blot analysis or its product by immunoblotting or by enzyme activity measurements. However the human cDNA encoding a 700 amino acid protein with a peroxisomal targeting C-terminal tripeptide S-K-L was isolated and is thought to be expressed under special conditions such as specific developmental stages or in a tissue specific manner in tissues that have not yet been examined. [provided by RefSeq, Jul 2008]

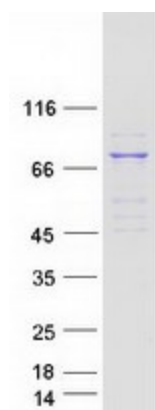
Product images:



Circular map for RC222515



Western blot validation of overexpression lysate (Cat# [LY401181]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222515 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACOX3 protein (Cat# [TP322515]). The protein was produced from HEK293T cells transfected with ACOX3 cDNA clone (Cat# RC222515) using MegaTran 2.0 (Cat# [TT210002]).