

Product datasheet for **RC213077**

OXCT2 (NM_022120) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OXCT2 (NM_022120) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OXCT2
Synonyms:	FKSG25; SCOTT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC213077 representing NM_022120
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGCGCTGCGGCTCCTGGCGTCAGTCTCGGGCGGGGTCCCCCGCGCGGCTCAGGGCTCGCGC
 TGTCACAGGGCTGCGCCCGCTGCTTTGCCACCAGTCCCCGGCTCCGTGCCAAGTTCTACGCGGACCCGGT
 GGAGATGGTGAAGGACATCTCTGACGGGGCAGCCGTCATGATCGGGGGCTTCGGGCTCTGCGGGATCCCC
 GAGAACCCTGATCGCCGCGCTGCTCAGGACCCCGCTGAAAGACCTGCAGGTGGTCAGCAGAACCTGGGCG
 TGGAGGACTTCGGCCTGGGCTCCTGCTGGCCGCCAGGCAGGTCCTGTCGATCGTCTGTTCTACGTGGG
 CGAGAACCCTGTGCGAGAGCCAGTACCTGGCAGGAGAGCTGGAGCTGGAGCTCACGCCCCAGGGCACC
 CTGGCCGAGCGCATCCGCGCGGGGGCGCCGGGTGCCCGCTTCTACACCCCCACGGGCTACGGGACCC
 TGGTCCAGGAAGGGGGCGCCCCATCCGCTACACCCCGGACGGCCACCTGGCGCTCATGAGCCAGCCCCG
 AGAGGTGAGGGAGTTCAACGGCGACCACCTTCTTTGGAGCGCCATCCGGGCAGACTTCGCCCTGGTG
 AAAGGGTGAAGGCCGACCGGGCAGAAACGTGGTCTTACAGGAGAAGCGCCGCAATTTCAACGTGCCCA
 TGTGCAAAGCTGCAGACGTCACGGCGGTGGAGGTGGAAGAGATCGTGGAGGTGGGGGCTTTCCCCCAGA
 AGACATCCACGTTCTAACATTTATGTAGATCGCGTGATAAAGGGGCAGAAATACGAGAAACGAATTGAG
 CGCTTAACGATCTGAAAGAGGAAGATGGAGACGCTGAAAGGAAGAGGACGCCAGGACGCGCATCATCA
 GACGCGCAGCTCTGGAATTTGAGGACGGCATGTACGCCAATCTGGGCATAGGCATCCCCCTGCTGGCCAG
 CAATTCATCAGTCCCAGCATGACTGTACATCTTACAGTGAGAACGGGATCCTGGGCTGGGCCGTTT
 CCCACGGAAGATGAGGTGGATGCCGACCTCATCAATGCAGGCAAGCAGACGGTCACGGTGTCTCCGGGG
 GCTGCTTCTTCCGACGACGACTCCTTCGCATGATCCGAGGGGGACACATCCAATAACCATGCTTGG
 AGCCATGCAGGTTTCCAATACGGCGACCTGGCGAACTGGATGATCCCTGGCAAGAAGGTGAAAGGCATG
 GGCGGTGCCATGGACTTGGTGTCCAGTCAAGACCAGAGTGGTGGTACCATGCAGCACTGCACAAAGG
 ACAACACCCCAAGATCATGGAGAAATGCACCATGCCGCTGACCGGGAAGCGGTGCGTGGACCGCATCAT
 CACCGAGAAGGCCGTGTTTGACGTGCACAGGAAGAAAGAGCTGACGCTGAGGGAGCTCTGGGAGGCCTG
 ACGGTGGACGACATCAAAAAGAGCACGGGGTGTGCCTTTGCTGTGTCGCCAACCTCAGGCCATGCAGC
 AGGTGGCACCC

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213077 representing NM_022120
 Red=Cloning site Green=Tags(s)

MAALRLLASVLRGVPAGGSLALSQGCARCFATSPRLRAKFYADPVMVKDISDGATVMIGGFGLCGIP
 ENLIAALLRTRVKDLQVSSNVGVDFLGLLLAARQVRRIVCSYVGENTLCEQYLAGELELELTPQGT
 LAERIRAGGAGVPAFYTPTYGTLVQEGGAPIRYTPDGHLLMSQPREVREFNGDHFLLERAIRADFALV
 KGWKADRAGNVVFRRSARNFNVPCKAADVTAVEVEEIVEVGAFPPEDIHVPNIYVDRVIKQKYEKRIE
 RLTIILKEEDGDAGKEEDARTRIIIRAALEFEDGMYANLIGIPLLASNFISPSMTVHLHSENGILGLGPF
 PTEDEVDADLINAGKQTVTVLPGGCFASDDSFAMIRGGHIQLTMLGAMQVSKYGLANWMIKPKVKGM
 GGAMDLVSSQKTRVVVTMQHCTKDNTPKIMEKCTMPLTGKRCVDRIITEKAVFDVHRKKELELRELWEGL
 TVDDIKKSTGCAFAVSPNLRPMQVAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6158_a02.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_022120

ORF Size: 1551 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_022120.1](#), [NP_071403.1](#)

RefSeq Size: 1824 bp

RefSeq ORF: 1554 bp

Locus ID: 64064

UniProt ID: [Q9BYC2](#)

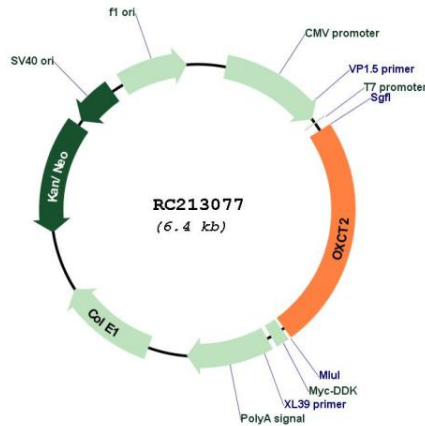
Cytogenetics: 1p34.2

Protein Pathways: Butanoate metabolism, Synthesis and degradation of ketone bodies, Valine, leucine and isoleucine degradation

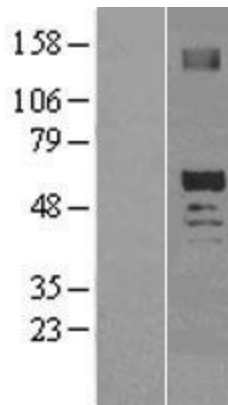
MW: 56 kDa

Gene Summary: The protein encoded by this gene catalyzes the transfer of a CoA group from succinate to acetoacetate and is an important enzyme in ketone body catabolism. The encoded protein localizes to the mitochondrion. This gene is intronless, and a pseudogene of this gene is located elsewhere on chromosome 1. [provided by RefSeq, Aug 2016]

Product images:



Circular map for RC213077



Western blot validation of overexpression lysate (Cat# [LY402907]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213077 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).