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 RC200518

ZCWCC1 (MORC2) (NM_014941) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZCWCC1 (MORC2) (NM_014941) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZCWCC1
Synonyms:	CMT2Z; DIGFAN; ZCW3; ZCWCC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200518 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTTTGCTTTTTGGATGATGGAGCAGGAATGGATCCAAGTGATGCTGCCAGTGTGATCCAGTTTGGGA
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GCGCATTGGGAAGGATTTTATCCTGTTCACCAAGAAGGAAGACACCATGACCTGCCTCTTCCTGTCTCGC
ACGTTTCATGAGGAAGAAGGCATTGATGAAGTGATAGTCCCACTGCCCACCTGGAATGCTCGGACCCGGG
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AATCTCAAACTCATGGATAATGGAGAGCCAGAACTAGACATAATCTCAAATCCAAGAGATATCCAGATGG
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CCTAGGTGGAGACCTCACGCGGGACTCCAGGGTGATGTTGCGACAGGTCCAGAACAGAGCCATCACTCTG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200518 protein sequence
Red=Cloning site Green=Tags(s)

MLCFLDDGAGMDPSDAASVIQFGKSAKRTPESTQIGQYGNGLKSGSMRIGKDFILFTKKEDTMTCLFLSR
TFHEEEGIDEVIVPLPTWNARTREPVTDNVEKFAIETELIYKYSPFRTEEEVMTQFMKIPGDSGTLVIIF
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KPRMYKYTSSRFKTRAEQEVKKAEHVARIAEEKAREAESKARTLEVRLGGDLTRDSRVMLRQVQNRAITL
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VVDVPYLVLEPTHNKQDFADAKEYRHLLRAMGEHLAQYWKDIAIAQRGIIKFWDEFGYLSANWNQPPSSE
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RNAPSRPPSLPTPRPASQPRKAPVISSTPKLPALAAREEASTSRLLQPPEAPRKPANTLVKTASRPAPLV
QQLSPSLLPNSKSPREVPSPKVIKTPVVKKTESPIKLSPATPSRKRSVAVSDEEEVEEEAERRKERCKRG
RFVVKEEKKDSNELSDSAGEEDSADLKRAQKDKGLHVEVRVNREWYTGRVTAVEVGKHVVRWKVKFDYVP
TDTTPRDRWVEKGSEDVRLMKPPSPEHQSLDTQQEGGEEEVGPVAQQAIAVAEPSTSECLRIEPDTTALS
TNHETIDLLVQILRNCLRYFLPPSFPISKKQLSAMNSDELISFPLKEYFKQYEVGLQNLCNSYQSRADSR
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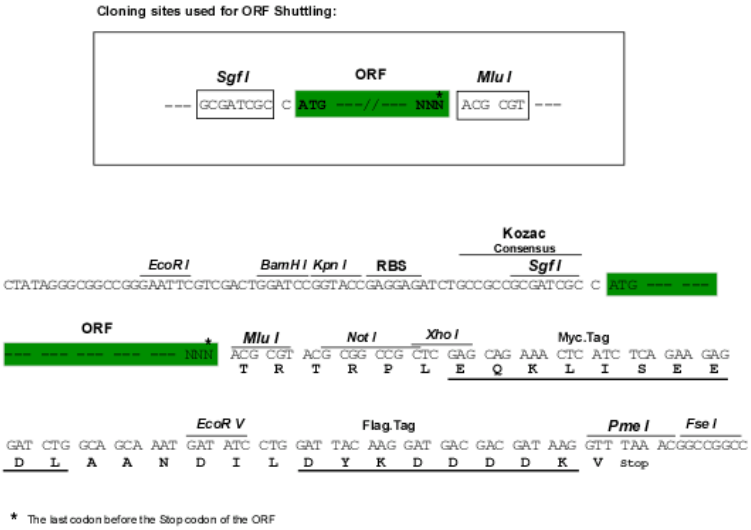
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6577_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

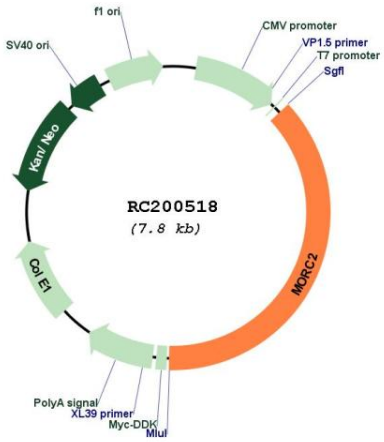


ACCN: NM_014941

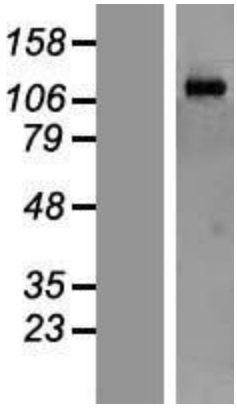
ORF Size: 2910 bp

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_014941.3
RefSeq Size:	4467 bp
RefSeq ORF:	2913 bp
Locus ID:	22880
UniProt ID:	Q9Y6X9
Cytogenetics:	22q12.2
MW:	110.7 kDa
Gene Summary:	This gene encodes a member of the Microrchidia (MORC) protein superfamily. The encoded protein is known to regulate the condensation of heterochromatin in response to DNA damage and play a role in repressing transcription. The protein has been found to regulate the activity of ATP citrate lyase via specific interaction with this enzyme in the cytosol of lipogenic breast cancer cells. The protein also plays a role in lipogenesis and adipocyte differentiation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RC200518



Western blot validation of overexpression lysate (Cat# [LY414907]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200518 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).