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 RC239333

C1orf170 (PERM1) (NM_001291367) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C1orf170 (PERM1) (NM_001291367) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C1orf170
Synonyms:	C1orf170
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC239333 representing NM_001291367
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGACCCAGGACGGGCAGCTCAGACGCCCAGCTCGGCCGCCGGGACCCAGGGCATGGATGGAGCCCC
GAGGCGGTGGGAGCTCCCAGTTCTCATCCTGCCCTGGTCCGGCGTCTTCTGGAGACCAGATGCAGAGGCT
TCTGCAGGGCCCTGCCCCACGGCCCCCTGGTGAGCCCCCTGGGAGTCCCAAGTCCCCTGGCCACAGCACT
GGCTCCCAGAGGCCCCCCGATAGCCCTGGAGCCCCACCACGGAGCCCCAGCCGAAAGAAGAGGCGAGCTG
TGGGTGCCAAGGGGGGTGGGCACACAGGAGCCTCTGCTTCTGCCCAGACGGGCTCCCCGCTGCTCCCTGC
GGCCAGTCCTGAGACGGCAAAGCTGATGGCCAAAGCCGGGCAGGAGGAGTTGGGGCCAGGTCCTGCAGGA
GCTCCTGAGCCTGGCCCCAGGTCCCCTGTGCAGGAAGACAGACCAGGGCCAGGTTTGGGCCTGTCTACAC
CTGTCCCTGTGACAGAGCAAGGCACAGACCAAATCAGAACCCCGCGCCGAGCCAAGCTGCACACAGTGTC
CACGACTGTCTGGGAAGCCCTCCCAGATGTCTCAAGGGCTAAGTCAGACATGGCTGTGTCTACACCTGCC
TCCGAGCCGCAACCTGACAGGGACATGGCTGTGTCTACACCTGCCTCCGAGCCGCAATCTGACAGGGACA
TGGCTGTGTCTACACCTGCCTCTGAGCCGCAACCTGACACGGACATGGCTGTGTCTACACCTGCCTCTGA
GCCGCAACCTGACAGGGACATGGCTGTGTCTATACCTGCCTCCAAGCCGCAATCTGACACGGCTGTGTCT
ACACCAGCTTCTGAGCCTCAGTCCAGTGTGGCTCTGTCTACACCCATCTCCAAGCCACAATTGGACACGG
ACGTGGCTGTGTCCACACCTGCCTCCAAACATGGCCTGGATGTGGCCTTGCCTACAGCAGGCCCAGTGGC
TAAGCTAGAGGTGGCTTCATCTCCACCTGTCTCGGAGGCTGTGCCGAGGATGACCGAGTCCAGCGGGCTT
GTGTCTACACCTGTTCCCAGAGCCGACGCCGCTGGCCTCGCCTGGCCTCCCACCCGCAGAGCTGGGCCTG
ATGTGGTGGAGATGGAGGCGGTTGTGTCTGAGCCCTCAGCAGGGGCCCCCGGATGCTGCTCTGGGGCACC
CGCACTGGGTCTCACCCAAGTCCCCAGGAAGAAGAAAGTGCGCTTCTCCGTGGCTGGGCCCAGCCCCAAT
AAGCCAGGCTCAGGACAGGCCTCAGCCCGGCCCTCAGCCCCCCAGACAGCAACTGGGGCCCACGGGGGGC
CCGGAGCCTGGGAGGCTGTGGCTGTCGGGCCCCGGCCCCACCAGCCTCGGATCCTCAAGCACCTGCCTCG
CCCCCCTCCCTCTGCCGTGACGAGGGTCGGGCCCGGGAGCAGCTTTGCCGTGACCCTCCCGGAGGCCTAC
GAGTTCTTCTTCTGTGACACCATCGAGGAGAACGAAGAGGCTGAGGCGGCAGCGGCCGGTCAGGATCCGG
CAGGCGTCCAGTGGCCGGACATGTGCGAGTTCTTCTTCCCAGACGTTGGAGCCCAGAGGTCGAGGCGGCG
GGGGTCCCCGGAGCCGCTCCCGAGAGCTGATCCTGTGCCGGCCCCCATACCTGGAGACCCCGTGCCCATC
TCCATCCCTGAGGTCTATGAACACTTCTTCTTCGGGGAGGACAGGCTTGAGGGCGTGCTGGGGCCGGCTG
TCCCGCTCCCACTGCAGGCCCTGGAGCCTCCCCGGTCGGCCTCCGAGGGGGCGGGGCCTGGGACCCCCCT
CAAGCCAGCCGTGGTAGAGCGGCTCCACCTGGCTCTTAGACGGGCAGGGGAGCTCCGGGGGCCTGTCCCA
TCATTTGCCTTCAGCCAGAATGACATGTGCCTGGTGTTTGTAGCTTTTGCCACCTGGGCTGTGAGGACGT
CAGATCCGCATACCCCAGACGCCTGGAAAACAGCCTTGCTGGCCAACGTCGGCACCATCTCTGCCATCCG
CTACTTCCGCCGGCAGGTGGGGCAAGGGCGCCGCAGCCACAGCCCCAGCCCCAGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

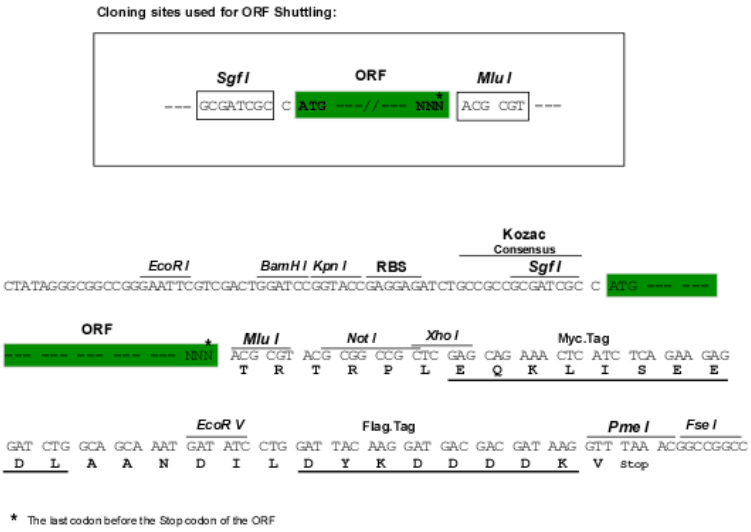
>RC239333 representing NM_001291367
Red=Cloning site Green=Tags(s)

MPTQDGQLRRPARPPGPRAWMEPRGGGSSQFSSCPGPASSGDQMQRLLQGPAPRPPGEPPGSPKSPGHST
GSQRPPDSPGAPPRSPSRKKRRAVGAKGGGHTGASASAQTGSPLLPAASPETAKLMAKAGQEELGPGPAG
APEPGPRSPVQEDRPGPGLGLSTPVPVTEQGTDQIRTPRRAKLHTVSTTVWEALPDVSRAKSDMAVSTPA
SEPQPDRDMAVSTPASEPQSDRDMAVSTPASEPQPDTDMAVSTPASEPQPDRDMAVSIPASKPQSDTAVS
TPASEPQSSVALSTPISKPQLDTDVAVSTPASKHGLDVALPTAGPVAKLEVASSPPVSEAVPRMTESSGL
VSTPVPRADAAGLAWPPTRRAGPDVVEMEAVVSEPSAGAPGCCSGAPALGLTQVPRKKKVRFSVAGPSPN
KPGSGQASARPSAPQTATGAHGGPGAWEAVAVGPRPHQPRILKHLPRPPPSAVTRVGPGSSFAVTLPEAY
EFFFCDTIEENEEAEAAAAGQDPAGVQWPDMCEFFFPDVGAQRSRRRGSPEPLPRADPVPAPIPGDPVPI
SIPEVYEHFFFGEDRLEGVLGPAVPLPLQALEPPRSASEGAGPGTPLKPAVVERLHLALRRAGELRGPVP
SFAFSQNDMCLVFVAFATWAVRTSDPHTPDAWKTALLANVGTISAIRYFRRQVGQGRRSHSPSPSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001291367

ORF Size: 2088 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001291367.1, NP_001278296.1

RefSeq Size: 3064 bp

RefSeq ORF: 2031 bp

Locus ID: 84808

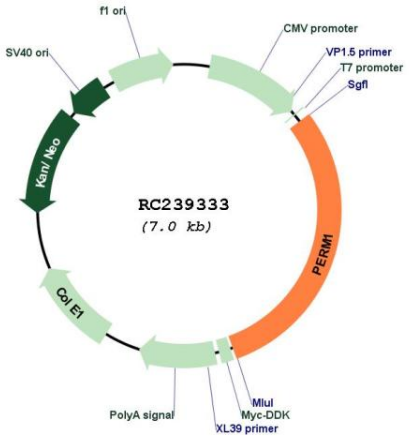
UniProt ID: Q5SV97

Cytogenetics: 1p36.33

MW: 72.4 kDa

Gene Summary: Regulates the expression of selective PPARGC1A/B and ESRRA/B/G target genes with roles in glucose and lipid metabolism, energy transfer, contractile function, muscle mitochondrial biogenesis and oxidative capacity. Required for the efficient induction of MT-CO2, MT-CO3, COX4I1, TFB1M, TFB2M, POLRMT and SIRT3 by PPARGC1A. Positively regulates the PPARGC1A/ESRRG-induced expression of CKMT2, TNNI3 and SLC2A4 and negatively regulates the PPARGC1A/ESRRG-induced expression of PDK4.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC239333