

## Product datasheet for **RC239569**

### **C1orf170 (PERM1) (NM\_001291366) Human Tagged ORF Clone**

#### **Product data:**

|                           |                                                        |
|---------------------------|--------------------------------------------------------|
| Product Type:             | Expression Plasmids                                    |
| Product Name:             | C1orf170 (PERM1) (NM_001291366) 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)                                   |



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**ORF Nucleotide  
Sequence:**

>RC239569 representing NM\_001291366  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAAAATTTCCAGTACAGCGTCCAGCTGAGTGACCAGGACTGGGCCGAGTTCTCAGCCACCGCCGATG  
 AGTGTGGCCTCCTGCAGGCCGGCCTGGCCTCTGGGGACGAGCTCTGTCCAGTGACATTGACCAAGGGGA  
 CAGCAGTGGCAGCAGTCCCCCAGGGCCCCACCTCTCCAACTGGGCAGCTAGCTGCAGGAGGGCGGAGC  
 CGGCGGGGCTGCGAGGAGGAGCAGTGGCCACACAGCAGCCGGTCAGCAGGTCTCAGGGTGAACCTGTCT  
 TGGCCCTGGGGACCGGTGACGAGACACCCAGCAGTCCGACGGGCAGAAAGCTCCACCGTCCCTCGGCC  
 CGGCGCCAGCCCTCCAGCCAGTTCTCATCTGCCCTGGTCCGGCGTCTTCTGGAGACCAGATGCAGAGG  
 CTTCTGCAGGGCCCTGCCCCACGGCCCCCTGGTGAACCCCTGGGAGTCCCAAGTCCCTGGCCACAGCA  
 CTGGCTCCAGAGGCCCCCGATAGCCCTGGAGCCCCACACGGAGCCCCAGCCGAAAGAAGAGGGCAGC  
 TGTGGGTGCCAAGGGGGTGGGCACACAGGAGCCTCTGCTTCTGCCAGACGGGTCCCCGCTGCTCCCT  
 GCGGCCAGTCTGAGACGGCAAAGCTGATGGCCAAAGCCGGGCAGGAGGAGTTGGGGCCAGGTCTCGAC  
 GAGCTCCTGAGCCTGGCCCCAGGTCCCCTGTGCAGGAAGACAGACCAGGGCCAGGTTTGGGCCTGTCTAC  
 ACCTGTCCCTGTGACAGAGCAAGGCACAGACCAATCAGAACCCCGCGCCGAGCCAAAGTGCACACAGTG  
 TCCACGACTGTCTGGGAAGCCCTCCAGATGTCTCAAGGGCTAAGTCAGACATGGCTGTGTCTACACCTG  
 CCTCCGAGCCGAACCTGACAGGGACATGGCTGTGTCTACACCTGCCTCCGAGCCGAATCTGACAGGGA  
 CATGGCTGTGTCTACACCTGCCTCTGAGCCGAACCTGACACGGACATGGCTGTGTCTACACCTGCCTCT  
 GAGCCGCAACCTGACAGGGACATGGCTGTGTCTACACCTGCCTCCAAGCCGAATCTGACACGGCTGTGT  
 CTACACCAAGTCTGAGCCTCAGTCCAGTGTGGCTGTGTCTACACCAATCTCCAAGCCACAATTGGACAC  
 GGACGTGGCTGTGTCCACACCTGCCTCCAACATGGCCTGGATGTGGCCTTGCCTACAGCAGGCCCAAGT  
 GCTAAGCTAGAGGTGGCTTCATCTCCACCTGTCTCGGAGGCTGTGCCGAGGATGACCGAGTCCAGCGGGC  
 TTGTGTCTACACCTGTTCCAGAGCCGACGCGCTGGCCTCGCCTGGCCTCCACCCGACAGAGTGGGCC  
 TGATGTGGTGGAGATGGAGGCGTTGTGTCTGAGCCCTCAGCAGGGGGCCCCGGATGCTGCTCTGGGGCA  
 CCCGACTGGGTCTACCCAAGTCCCAGGAAGAAGAAAGTGCCTTCTCCGTGGCTGGGCCAGCCCCA  
 ATAAGCCAGGCTCAGGACAGGCCTCAGCCCGGCCCTCAGCCCCCAGACAGCAACTGGGGCCACGGGGG  
 GCCCGGAGCCTGGGAGGCTGTGGCTGTGGGGCCCCGGCCCCACAGCCTCGGATCCTCAAGCACCTGCCT  
 CGCCCCCTCCCTCTGCCGTGACGAGGGTGGGGCCGGGAGCAGCTTTGCCGTGACCTCCCGGAGGCCT  
 ACGAGTTCTTCTGTGACACCATCGAGGAGAACGAAGAGGCTGAGGCGGACGCGCCGGTCAAGATCC  
 GGCAGGCGTCCAGTGGCCGGACATGTGCGAGTTCTTCTCCAGACGTTGGAGCCAGAGGTGAGGCGG  
 CGGGGGTCCCCGGAGCCGCTCCCGAGAGCTGATCCTGTGCCGGCCCCATACCTGGAGACCCCGTGCCCA  
 TCTCCATCCCTGAGGTCTATGAACATTTCTTCTCGGGGAGGACAGGCTTGAGGGCGTGTGGGGCCGGC  
 TGTCCCGCTCCCACTGCAGGCCCTGGAGCCTCCCCGGTCGGCCTCCGAGGGGGCGGGGCTGGGACCCCC  
 CTCAAGCCAGCCGTGGTAGAGCGGCTCCACCTGGCTCTTAGACGGGCAGGGGAGCTCCGGGGGCTGTCC  
 CATCATTTGCCTTCAGCCAGAATGACATGTGCCTGGTGTGTGTAGCTTTTGCCACCTGGGCTGTGAGGAC  
 GTCAGATCCGCATACCCAGACGCTGGAAAACAGCCTTGCTGGCCAACGTCGGCACCATCTCTGCCATC  
 CGCTACTTCGCCGGCAGGTGGGGCAAGGGCGCCGACGCCACAGCCCCAGCCCCAGCTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

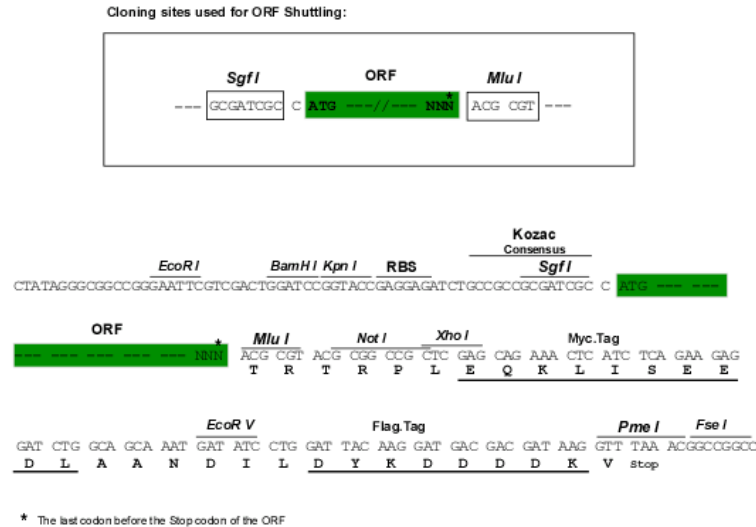
**Protein Sequence:** >RC239569 representing NM\_001291366  
 Red=Cloning site Green=Tags(s)

MENFQYSVQLSDQDWAEFSADECEGLLQAGLASGDELLSSDIDQGDSSGSSPPRAPPLPTGQLAAGGRS  
 RRGCEEDVATQQPVSRSQGEPVLALGTGQTPSTSARAEAPPSLGPGASPPSQFSSCPGPASSGDQMQR  
 LLQGPAPRPPGEPSPKSPGHSTGSQRPPDSPGAPPRSPSRKKRRVAGAKGGGHTGASASQTGSPLLP  
 AASPETAKLMAKAGQEELGPGAGAPEGPRSPVQEDRPGPLGLSTPVPVTEQGTQDQIRTPRAKLHTV  
 STTVWEALPDVSRKSDMAVSTPASEPQPDMDMAVSTPASEPQSDRMDMAVSTPASEPQPDMDMAVSTPAS  
 EPQPDMDMAVSIKASKPQSDTAVSTPASEPQSSVALSTPIKPKQLDQDVAVSTPASKHGLDVALPTAGPV  
 AKLEVASSPPVSEAVPRMTESSGLVSTPVPRAAAGLAWPPTRRAGPDVVEAEVSEPSAGAPGCCSGA  
 PALGLTQVPRKKKYRFSVAGPSPNKPQSGQASARPSAPQTATGAHGGPGAWAEAVVGPVPHQPRILKHL  
 RPPPSAVTRVPGSSFAVTLPEAYEFFFCDTIEENEEAEAAAAGQDPAGVQWPDMEFFFPDVGQRSSR  
 RGSPEPLPRADVPAPIPGDPVPIPIPEVYEHFFGEDRLEGVLGPAVPLPLQALEPPRSASEGAGPGTP  
 LKPAVVERLHLALRRAGELRGVPSFAFSQNDMCLVFVAFATWAVRTSDPHTPDWKTALLANVTISAI  
 RYFRRQVGQGRSHSPSPSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

Cloning Scheme:



|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACCN:           | NM_001291366                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ORF Size:       | 2370 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. <a href="#">More info</a> |
| 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\\_001291366.2](#)

**RefSeq Size:** 3417 bp

**RefSeq ORF:** 2373 bp

**Locus ID:** 84808

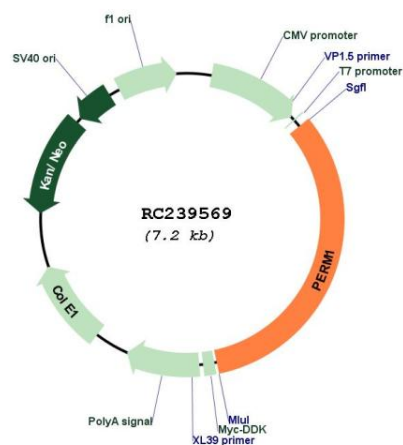
**UniProt ID:** [Q5SV97](#)

**Cytogenetics:** 1p36.33

**MW:** 81.8 kDa

**Gene Summary:** Regulates the expression of selective PPARGC1A/B and ESRRB/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 RC239569