

Product datasheet for MC223214

Ppargc1b (NM_133249) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ppargc1b (NM_133249) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ppargc1b
Synonyms:	4631412G21Rik; Perc
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223214 representing NM_133249 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCGGGGAACGACTGCGGCGCGCTGCTGGATGAAGAGCTCTCGTCCTTCTCCTCAACTATCTCTCTG
ACACGCAGGGTGGGACTCTGGAGAGGAACAGCTGTGTGCTGACTTGCCAGAGCTTGACCTCTCCAGCT
GGACGCCAGTGACTTTGACTCAGCCACGTGCTTTGGGGAGCTGCAGTGGTCCCGGAGACCTCAGAGACA
GAGCCCAGCCAGTACAGCCCGATGACTCCGAGCTCTCCAGATTGACAGTGAGAATGAAGCTCTCTTGG
CTGCGCTTACGAAGACCCTGGATGACATCCCCGAAGACGATGTGGGGCTGGCTGCCTTCCAGAAGCTGGA
TGAAGGCGACACACCATCCTGCACCCAGCCTCACCTGCCCTTATCTGCACCCCCAGCCCCACCCTG
GAGAGGCTTCTGTCCCAGCGTCTGACGCTCTGAAGGACGGGGCCACCTGGTCCCAGACCAGCCTCAGTTCCAG
AAGTCAGCGGCCCTTGTCAAGGTGGATGGCACCAGGATAAGAAGACCCCCACTGCGGGCTCAGAGC
CGGCCTTGTACGGAAGTGCATAAGCACCTCACTTCGGTGTGCCCTGTCCAGAGTGAAGCCTGCTCCC
CAACTCCGACCCGAGCCCTCGGCTCCTCTCAAAGAGGAGGAGGAGGAGGTGGGGAGGATTGCCAAG
CCCTTGGCCGACTCCAGCCTCGCCCAAGACTCCCTAGCACAGGACACGGCCAGCCCGACAGTGGCCAG
CCTCCCGAGGAGGATGTGAGGGCATTGGTACAGCTCATTGCTACATGCATACCTACTGCCTGCCTCAGA
GGAAGCTGCCCAACGGGCCAGAGCCAAATCCCCAGGCCTGCAGCAGCCTCTCCAGGCAGGTTCAACC
CCGATCCCGCATCCCCCAAAGCCTTCTGGACTGAGTTCTCTATCCTAAGGAACTTCTGGCCCAAGAT
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TGCTTCCCCAAGAGCACCGGCCCTAGACCAGCCTGCGTCTCTGAGGCTGGAGGTGAAACGGGATGTT
ACAAGCTACAAGGCAAAGCGGGAGGAAGATGAGGAGGAGGAGGAGGAAGAAGAAGAGGAAGAAG
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GAGGAAGATGGACAGCTCCGTGTCCCCGTGCGGCGCTCCAGGAGACTGAATCCAGAGCTGGGTCCTCGG
CTGACATTCAGTATGAGCCCTTAGGTGCTCTGCCCTCGATGTGCTGGATACAGAGACCCACAACCTGG



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AGGAAGACCTGGGCAGCCTCACAGACAGTAGTCAAGGCCGGCAGCTCCCCAGGGATCCCAGATCCCCGC
CCTGGAAGCCCCCTGTGAGAGTGGGTGCGGAGACACAGATGAAGATCCAAGCTGCCACAGCCCCTTCC
AGAGACTCCTCCAGGTGCCTCATGTGGCTTGTCAAAAGCGACTCTTTGGCAAGAAGAGCTTTGAGG
AGTCCCTGACGGTGGAGCTTTGCGGCACGGCAGGACTCACGCCACCCACCACACCTCCATACAAGCCAAT
GGAGGAGGACCCCTTCAAGCCAGACACCAAGCTCAGCCCAGGCCAAGACACAGCTCCCAGCCTTCCCTCC
CCCGAGGCTCTTCCGCTCACAGCCACCCAGGAGCTTCCACAAGCTGCCAAGAGGCACCCAGAGCGAA
GCGAGCTCCTGTCCATTTGCAGCATGCCACAACCAACCAGTCTCACAGGCTGCCAAGAGCGCCCTT
CTCCTGCTCCTTTGGAGACCACGACTACTGCCAGGTGCTCAGGCCAGAGGCTGCCCTGCAGAGGAAGGTG
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AAACAAAGGCCCTAGGAGGGAGGCAAACCAGAAGTGTGACCCTACCCACAAGGACAGCATGCAGCTAAG
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CTGGGCTCCTGTAAAAGCCCGGAGTATGACACCGTATTTGAGGACAGCAGCAGCAGTGGCGAGAGTA
GCTTCTGCTTGAGGAGGAGGAGGAAGAGGAGGAGGGAGGGAAGAGGACGATGAAGGAGAGGACTCAGG
GGTCAGCCCTCCCTGCTGATCACTGCCCTACCAGAGCCACCCAGTAAGGCCAGTCGGCAGCTCTGC
TCCCGAAGCCGCTCCAGTTCGGCTCCTGCTCCTGCAGTCTGGTCAACAGCCACCCGGAAGAACTTCA
GACGTGAGAGCAGAGGGCCCTGTTAGATGGAACCCCAAGCGTCCGGCATGCCAGGAAGCGCGGAAAA
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AAGCGCTTTGAGGTGTTCCGGTGTGATGAGAGTCCAGGTGCTGACGAGAAGTAAAAGAGGCCAGAAGC
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GCGCAATGAGCCCTCCTTCCACCTGAGCTATGGAGGGCTCCGGCACTTCCGTTGGCCAGATACACTGAC
TATGATCCACATCTGAGGAGTCCCTCCCTCATCTGGGAAAAGCAAGTACGAAGCCATGGATTTTGACA
GCTTACTGAAAGAGGCCAGCAGAGCCTGCATTGA
    
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_133249
- Insert Size:** 3045 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_133249.2](#), [NP_573512.1](#)
- RefSeq Size:** 3656 bp
- RefSeq ORF:** 3045 bp

Locus ID: 170826

UniProt ID: [Q8VHJZ](#)

Cytogenetics: 18 E1

Gene Summary: Plays a role of stimulator of transcription factors and nuclear receptors activities. Activates transcriptional activity of estrogen receptor alpha, nuclear respiratory factor 1 (NRF1) and glucocorticoid receptor in the presence of glucocorticoids. May play a role in constitutive non-adrenergic-mediated mitochondrial biogenesis as suggested by increased basal oxygen consumption and mitochondrial number when overexpressed. May be part of the pathways regulating the elevation of gluconeogenesis, beta-oxidation of fatty acids and ketogenesis during fasting. Stimulates SREBP-mediated lipogenic gene expression in the liver. Induces energy expenditure and antagonizes obesity when overexpressed. Induces also the expression of mitochondrial genes involved in oxidative metabolism. Induces the expression of PERM1 in the skeletal muscle in an ESRRA-dependent manner.[UniProtKB/Swiss-Prot Function]