

Product datasheet for MR226760

Ppargc1b (NM_133249) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ppargc1b (NM_133249) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ppargc1b
Synonyms:	4631412G21Rik; Perc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226760 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGGAACGACTGCGGGCGCTGCTGGATGAAGAGCTCTCGTCCTTCTTCTCAACTATCTCTCTG
ACACGCAGGGTGGGGACTCTGGAGAGGAACAGCTGTGTGCTGACTTGCCAGAGCTTGACCTCTCCAGCT
GGACGCCAGTGACTTTGACTCAGCCACGTGCTTTGGGGAGCTGCAGTGGTCCCCGGAGACCTCAGAGACA
GAGCCCAGCCAGTACAGCCCCGATGACTCCGAGCTCTCCAGATTGACAGTGAGAATGAAGCTCTCTTGG
CTGCGCTTACGAAGACCCTGGATGACATCCCCGAAGACGATGTGGGGCTGGCTGCCTTCCAGAAGTGA
TGAAGGCGACACACCATCCTGCACCCAGCCTCACCTGCCCTTATCTGCACCCCCAGCCCCACCCTG
GAGAGGCTTCTGTCCCCAGCGTCTGACGTGGACGAGCTTTCAGTCTACAGAAGCTCCTCCTGGCCACAT
CCTCCCCAACAGCAAGCTCTGACGCTCTGAAGGACGGGGCCACCTGGTCCCAGACCAGCCTCAGTCCAG
AAGTCAGCGGCCCTTGTGTCAAGGTGGATGGCACCCAGGATAAGAAGACCCCCACACTGCGGGCTCAGAGC
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CAGCTCCGACCCGAGCCCTCGGCTCCTCTCCAAAGAGGAGGAGGAGGAGGTGGGGGAGGATTGCCAAG
CCCTTGGCCGACTCCAGCCTCGCCCCAAGACTCCCTAGCACAGGACACGGCCAGCCCCGACAGTGCCAG
GCTCCCAGGAGGATGTGAGGGCCATGGTACAGCTCATTGCTACATGCATACCTACTGCCTGCCTCAGA
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CCGATCCCGCATCCCCCAAAGCCTTCTGGACTGAGTCTCTATCCTAAGGGAACCTTCTGGCCCAAGAT
ATCCTCTGTGATGTTAGCAAGCCCTACCGCTGGCCATACCTGTCTATGCTTCCCTCACACCTCAGTCCA
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 AGAGACTCCTCCAGGTGCCTCATGCTGGCTTGTACAAAAGCGACTCTCTTGGCAAGAAGAGCTTTGAGG
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 GCGAGCTCCTGTCCATTTGCAGCATGCCACAACCCAACCAAGTCTCACAGGCTGGCCAGAAGCGCCCTT
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 TATGATCCACATCTGAGGAGTCCCTTCCCTCATCTGGGAAAAGCAAGTACGAAGCCATGGATTTTGACA
 GCTTACTGAAAGAGGCCACGACAGCCTGCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR226760 protein sequence
 Red=Cloning site Green=Tags(s)

MAGNDCGALLDEELSSFFLNLYLSDTQGGDSGEEQLCADLPELDLSQLDASDFDSATCFGELQWCPETSET
 EPSQYSPDDSELFQIDSENEALLAALTKTLDDIPEDDVGLAAFPPELDEGDTSPCTPASPAPLSAPPSTL
 ERLSPASDVDELSLLQKLLLATSSPTASSDALKDGTWSQTSLSRSRQPCVKVDGTQDKKTPTLRAQS
 RPCTELHKHLTSVLPQPRVKACSPAPHPSPRLLSKEEEEEVGEDCPSWPTPASPQSLAQDTASPDASQ
 APEEDVRAMVQLIRYMHTYCLPQRKLPQRAPEPIPQACSSLRQVQPRSRHPPKAFWTEFSILRELLAQD
 ILCDVSKPYRLAIPVYASLTPQSRPRPPKDSQASPAYSAMAEVIRITASPKSTGPRPSLRPLRLEVKRDV
 NKPTRQKREDEEEEEEEEEEEEEEEEEWGRKRPRGRPLPWTGLGRKMDSSVCPVRRSRRLNPELGPW
 LTFDEPLGALPSMCLDTEHNLLEEDLGS�TDSSQGRQLPQGSQIPALESPCESGCGDTEDEPSCPQPTS
 RDSSRCLMLALSQSDSLGKKSFEESLTVELCGTAGLTPPTTPPYKPMEDPFKPDTKLSPGQDTAPSLPS
 PEALPLTATPGASHKLPKRHPERSELLSHLQHATTQPVSQAGQKRPFSCSFGDHDYCVLRPEAALQRKV
 LRSWEPIGVHLEDLAQGAPLPTETKAPRREANQNDPTHKDSMQLRDHEIRASLTKHFGLLETALEGED
 LASCKSPEYDVFEDSSSSSGESSFLLEEEEEEGGEEDDEGEDSGVSPPCSDHCPYQSPPSKASRQLC
 SRSRSSGSSSSSWSPATRKNFRRESRGPCSDGTPSVRHARKRREKAIGEGRVVYIRNLSSDMSSRELK
 KRFEVFGIEVCQVLTRSKRGQKHGFIIFRCSEHAALSVRNGATLKRKNEPSFHL SYGGLRHFWRPRYTD
 YDPTSEESLPSSGKSKYEAMDFDLSLLKEAQSLH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_133249

ORF Size: 3045 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_133249.1](#), [NM_133249.2](#), [NP_573512.1](#)

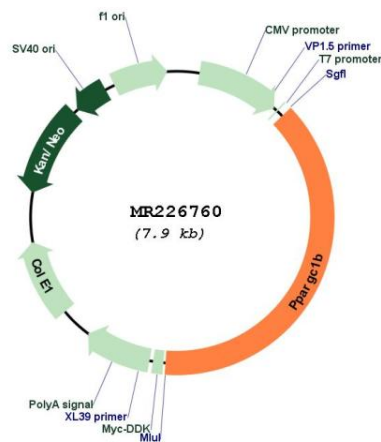
RefSeq Size: 3656 bp

RefSeq ORF: 3045 bp

Locus ID: 170826
 UniProt ID: [Q8VHJZ](#)
 Cytogenetics: 18 E1
 MW: 112 kDa

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]

Product images:



Circular map for MR226760