

Product datasheet for **MG226760**

Ppargc1b (NM_133249) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ppargc1b (NM_133249) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ppargc1b
Synonyms:	4631412G21Rik; Perc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226760 representing NM_133249 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGGAACGACTGCGGCGCGCTGCTGGATGAAGAGCTCTCGTCCTTCTTCTCAACTATCTCTCTG
ACACGCAGGGTGGGGACTCTGGAGAGGAACAGCTGTGTGCTGACTTGCCAGAGCTTGACCTCTCCAGCT
GGACGCCAGTGACTTTGACTCAGCCACGTGCTTTGGGGAGCTGCAGTGGTCCCCGGAGACCTCAGAGACA
GAGCCCAGCCAGTACAGCCCCGATGACTCCGAGCTCTTCCAGATTGACAGTGAGAATGAAGCTCTCTTGG
CTGCGCTTACGAAGACCCTGGATGACATCCCCGAAGACGATGTGGGGCTGGCTGCCTTCCAGAAGTGA
TGAAGGCGACACACCATCCTGCACCCAGCCTCACCTGCCCTTATCTGCACCCCCAGCCCCACCCTG
GAGAGGCTTCTGTCCCCAGCGTCTGACGTGGACGAGCTTTCAGTCTACAGAAGCTCCTCCTGGCCACAT
CCTCCCCAACAGCAAGCTCTGACGCTCTGAAGGACGGGGCCACCTGGTCCCAGACCAGCCTCAGTCCAG
AAGTCAGCGGCCCTTGTGTCAAGGTGGATGGCACCCAGGATAAGAAGACCCCCACACTGCGGGCTCAGAGC
CGGCTTGTACGGAAGTGCATAAGCACCTCACTTCGGTGTGCCCTGTCCAGAGTGAAGCCTGTCTCC
CAGCTCCGACCCGAGCCCTCGGCTCCTCTCCAAGAGGAGGAGGAGGAGGTGGGGGAGGATTGCCAAG
CCCTTGGCCGACTCCAGCCTCGCCCCAAGACTCCCTAGCACAGGACACGGCCAGCCCCGACAGTGCCAG
GCTCCCAGGAGGATGTGAGGGCCATGGTACAGCTCATTGCTACATGCATACCTACTGCCTGCCTCAGA
GGAAGCTGCCCAACGGGCCCCAGAGCCAATCCCCAGGCTGCAGCAGCCTCTCCAGGCAGGTTCAACC
CCGATCCCGCATCCCCCAAAGCCTTCTGGACTGAGTCTCTATCCTAAGGGAACCTTCTGGCCCAAGAT
ATCCTCTGTGATGTTAGCAAGCCCTACCGCTGGCCATACCTGTCTATGCTTCCCTCACACCTCAGTCCA
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TGCTTCCCCCAAGACACCGGGCTAGACCCAGCCTGCGTCTCTGAGGCTGGAGGTGAAACGGGATGTT
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AAAAAGAAGGAAGAAGAGGAGTGGGGCAGGAAGAGACCAGGTCGTGGCCTGCCATGGACCAAAGTGG
GAGGAAGATGGACAGCTCCGTGTGCCCGTGGCGCTCCAGGAGACTGAATCCAGAGCTGGGTCCCTGG



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CTGACATTCAGTACTGATGAGCCCTTAGGTGCTCTGCCCTCGATGTGCCTGGATACAGAGACCCACAACCTGG
 AGGAAGACCTGGGCAGCCTCACAGACAGTAGTCAAGGCCGGCAGCTCCCCAGGGATCCCAGATCCCCGC
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 GGTGAGCCCTCCCTGCTGATCACTGCCCTACCAGAGCCACCCAGTAAAGCCAGTCCGCGAGCTCTGC
 TCCCGAAGCCGCTCCAGTTCGGCTCCTCGTCCGAGCTCCTGGTACCAGCCACCCGGAAGAACTTCA
 GACGTGAGAGCAGAGGGCCCTGTTGAGTGAACCCCAAGCGTCCGGCATGCCAGGAAGCGCGGAAAA
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 AAGCGCTTTGAGGTGTTCCGGTGAAGTGTAGAGTGCCAGGTGCTGACGAGAAGTAAAAGAGGCCAGAAGC
 ACGGTTTTATCACCTTCCGGTGTTCAGAGCAGCTGCCCTGTCCGTGAGGAACGGCGCCACCCTGAGAAA
 GCGCAATGAGCCCTCCTTCCACCTGAGCTATGGAGGGCTCCGGCACTTCCGTTGGCCAGATACACTGAC
 TATGATCCACATCTGAGGAGTCCCTCCCTCATCTGGGAAAAGCAAGTACGAAGCCATGGATTTTGACA
 GCTTACTGAAAGAGGCCACGACAGCCTGCAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226760 representing NM_133249
 Red=Cloning site Green=Tags(s)

MAGNDCGALLDEELSSFFLNYLSDTQGGDSGEEQLCADLPELDLSQLDASDFDSATCFGELQWCPETSET
 EPSQYSPDDSELFQIDSENEALLAALTKLDDIPEDDVGLAFAFPELDEGTPSCTPASPAPLSAPPSPTL
 ERLLSPASDVDELSLLQKLLLATSSPTASSDALKDGTWSQTSLSRSRQPCVKVDGTQDKKPTLRAQS
 RPCTELHKHLTSVLPQPRVKACSPAPHPSPRLLSKEEEEEVGEDCPSWPTPASPQSLAQDTASPSAQ
 APEEDVRAMVQLIRYMHTYCLPQRKLPQRAPEPIPQACSSLRQVQPRSRHPPKAFWTEFSILRELLAQD
 ILCDSKPYRLAIPVYASLTPQSRPRPKDSQASPAYSAMAEVIRITASPKSTGPRPSLRPLRLEVKRDV
 NKPTRQKREDEEEEEEEEEEEEEEEEEWGRKRPGRGLPWTKLGRKMDSSVCPVRRSRRLNPELGPW
 LTFDEPLGALPSMCLDTEHNLLEEDLGLSDSSQGRQLPQGSQIPALESPCESGCGDTEDEPSCPQPTS
 RDSRCLMLALSQSDSLGKKSFEESLTVELCGTAGLTPPTTPPYKPMEDPFKPDTKLSPGQDTAPSLPS
 PEALPLTATPGASHKLPKRHPERSELLSHLQHATTQPVSQAGQKRPFSCSFGDHDYCVLQVLRPEAALQRKV
 LRSWEPIGVHLEDAQQGAPLPTETKAPRREANQNDPTHKDSMQLRDHEIRASLTKHFGLLETALEGED
 LASCKSPEYDTVFEDSSSSSGESSFLLEEEEEEGEEDDEGEDSGVSPPCSDHCPYQSPPSKASRQLC
 SRSRSSSGSSSCSSWSPATRNFRRESRGPSCDGTSPVRHARKRREKAIGEGRVVYIRNLSMDSSRELK
 KRFEVFGIEVCQVLTRSKRGQKHGFIIFRCSEHAALSVRNGATLRKRNEPSFHL SYGGLRHRWPRYTD
 YDPTSEESLPSSGKSKYEAMDFDLSLLKEAQSLH

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

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:	<ol style="list-style-type: none">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:	Q8VHJ7
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]