

Product datasheet for **RG224480**

PGC1 beta (PPARGC1B) (NM_133263) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PGC1 beta (PPARGC1B) (NM_133263) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PPARGC1B
Synonyms:	ERRL1; PERC; PGC-1(beta); PGC1B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG224480 representing NM_133263 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGGAACGACTGCGGCGCGCTGCTGGACGAAGAGCTCTCCTCCTTCTTCTCAACTATCTCGCTG
ACACGCAGGGTGGAGGGTCCGGGGAGGAGCAACTCTATGCTGACTTTCCAGAACTTGACCTCTCCAGCT
GGATGCCAGCGACTTTGACTCGGCCACCTGCTTTGGGGAGCTGCAGTGGTGGCCAGAGAAGCTCAGAGACT
GAACCCAAACAGTACAGCCCGATGACTCCGAGCTCTTCCAGATTGACAGTGAGAATGAGGCCCTCTGG
CAGAGCTACCAAGACCCTGGATGACATCCCTGAAGATGACGTGGTCTGGCTGCCTTCCAGCCCTGGA
TGGTGGAGACGCTCTATCATGCACCTCAGCTTCGCTGCCCTCATCTGCACCCCCAGCCCTGCCCG
GAGAAGCCCTCGGCCAGCCCTGAGGTGGACGAGCTCTCACTGCTGCAGAAGCTCTCTGGCCACAT
CCTACCCAACATCAAGCTCTGACACCCAGAAGGAAGGGACCGCTGGCGCCAGGCAGGCCTCAGATCTAA
AAGTCAACGGCCTTGTGTTAAGGCGGACAGCACCCAAGACAAGAAGGCTCCCATGATGCAGTCTCAGAGC
CGAAGTTGTACAGAACTACATAAGCACCTCACCTCGGCACAGTGTGCCTGCAGGATCGGGGTCTGCAGC
CACCATGCCTCCAGAGTCCCGGCTCCCTGCCAAGGAGGACAAGGAGCCGGTGGAGACTGCCGAGCCC
CCAGCCAGCTCCAGCCTCTCCAGGACTCCCTAGCTCTGGGCAGGGCAGACCCCGGTGCCCGGTTTCC
CAGGAAGACATGCAGGCGATGGTCAACTACATGCTACATGCACACTACTGCTCCCCAGAGGAAGC
TGCCCCACAGACCCCTGAGCCACTCCCCAAGGCTGCAGCAACCCTCCAGCAGGTGAGATCCCGGCC
CTGGTCCCGCACCACTCCAAGCCTCCTGGGCTGAGTTCTCCATTCTGAGGGAACCTTCTGGCTCAAGAC
GTGCTCTGTGATGTCAGCAAACCCTACCGTCTGGCCACGCCTGTTTATGCCTCCCTCACACCTCGGTCAA
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AAAAGAGGAGGAGGAGGAGTGGGCGAGAAAAGGCCAGGCCGAGCCTGCCATGGACGAAGCTGGGGAG
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ACATTTGCAGATGAGCCGCTGGTCCCCTCGGAGCCCCAAGGTGCTCTGCCCTCACTGTGCCTGGCTCCCA
 AGGCCTACGACGTAGAGCGGGAGCTGGGCAGCCCCACGGACGAGGACAGTGGCCAAGACCAGCAGCTCCT
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 GCAAGTATGAAGCCATGGATTTTGACAGCTTACTGAAAGAGGCCACAGCAGAGCCTGCAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG224480 representing NM_133263
 Red=Cloning site Green=Tags(s)

MAGNDCGALLDEELSSFFLNLYLADTQGGSGEEQLYADFPDLDSQLDASDFDSATCFGELQWCPENSET
 EPNQYSPDDSELFQIDSENEALLAELTKLDDIPEDDVGLAAFPALDGGDALSCTSASPAPSSAPPSPAP
 EKPSAPAPEVDELSLLQKLLLATSYPTSSSDTQKEGTAWRQAGLRSKSQRPCVKADSTQDKKAPMMQSQS
 RSCTELHKHLTSAQCCLQDRGLQPPCLQSPRLPAKEDKEPGEDCPSQPAPASPQDSLALGRADPGAPVS
 QEDMQAMVQLIRYMHTYCLPQRKLPQTPEPLPKACSNPSQQVRSRPWSRHHKASWAEFSLRELLAQD
 VLCDSKPYRLATPVYASLTPRSRPRPKDSQASPRPSSVEEVRIAASPKSTGPRPSLRPLRLEVKREV
 RRPARLQQEEEEEEEEEEEEEEEEEWGRKRPGRPLPWTKLGRKLESSVCPVRRSRRLNPELGPWL
 TFADEPLVPSEPGALPSLCLAPKAYDVERELGSPTDEDSGQDQQLLRGPQIPALESPCESGCGDMDEDP
 SCPQLPPRDSRCLMLALSQSDPTFGKKSFEQTLTVELCGTAGLTPPTTPPYKPTTEDPFKPDIKHSLGK
 EIALSLPSPEGLSLKATPGAHLKPKKHPERSELLSHLRHATAQPASQAGQKRPFSFSGFDHYCQVLRP
 EGVLRKVLRSWEPGSHLEDWPQQGAPWAEAQAPGREEDRSCDAGAPPKSTLLRDHEIRASLTKHFGFL
 LETALEEEDLASCKSPEYDVFEDSSSSSGESSFLPEEEEEEGEEEEDEEEDSGVSPTCDHCPYQSP
 PSKANRQLCSRSRSSGSSPCHSWPATRRNFRCESRGPCSDRTPSIRHARKRREKAIGEGRVVYIQNLS
 SDMSRELKRRFEVFGIEEVEVLRNRRRGEKYGFITYRCSEHAALSLTKGAALRKRNEPSFQLSYGGLR
 HFCWPRYTDYDSNSEEALPASGSKYEAMDFDLSLLKEAQQSLH

TRTRPLE - GFP Tag - V

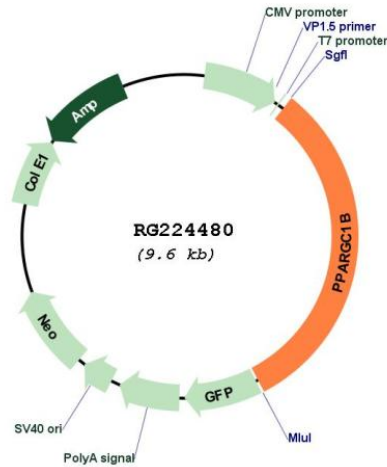
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_133263

ORF Size: 3069 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:	<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_133263.2 , NP_573570.2
RefSeq Size:	3277 bp
RefSeq ORF:	3072 bp
Locus ID:	133522
UniProt ID:	Q86YN6
Cytogenetics:	5q32
Protein Families:	Druggable Genome, Transcription Factors
Gene Summary:	The protein encoded by this gene stimulates the activity of several transcription factors and nuclear receptors, including estrogen receptor alpha, nuclear respiratory factor 1, and glucocorticoid receptor. The encoded protein may be involved in fat oxidation, non-oxidative glucose metabolism, and the regulation of energy expenditure. This protein is downregulated in prediabetic and type 2 diabetes mellitus patients. Certain allelic variations in this gene increase the risk of the development of obesity. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010]