

Product datasheet for **RC212244**

PGC1 alpha (PPARGC1A) (NM_013261) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PGC1 alpha (PPARGC1A) (NM_013261) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PGC1 alpha
Synonyms:	LEM6; PGC-1(alpha); PGC-1alpha; PGC-1v; PGC1; PGC1A; PPARGC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC212244 representing NM_013261
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGTGGGACATGTGCAACCAGGACTCTGAGTCTGTATGGAGTGACATCGAGTGTGCTGCTCTGGTTG
 GTGAAGACCAGCCTCTTTGCCAGATCTTCTGAACCTTGATCTTTCTGAACTAGATGTGAACGACTTGGA
 TACAGACAGCTTTCTGGGTGGACTCAAGTGGTGCAGTGACCAATCAGAAATAATATCCAATCAGTACAAC
 AATGAGCCTTCAAACATATTTGAGAAGATAGATGAAGAGAATGAGGCAAACCTTGCTAGCAGTCTCACAG
 AGACACTAGACAGTCTCCCTGTGGATGAAGACGGATTGCCCTCATTTGATGCGCTGACAGATGGAGACGT
 GACCACTGACAATGAGGCTAGTCTTCCCTCATGCCTGACGGCACCCCTCCACCCAGGAGGCAGAAGAG
 CCGTCTCTACTTAAAGACTCTTACTGGCACCAGCCAACACTCAGCTAAGTTATAATGAATGCAGTGGTC
 TCAGTACCCAGAACCATGCAATCACAATCACAGGATCAGAACAACCCCTGCAATTGTTAAGACTGAGAA
 TTCATGGAGCAATAAAGCGAAGAGTATTTGTCAACAGCAAAAGCCACAAAGACGTCCTGCTCGGAGCTT
 CTCAAATATCTGACCACAACGATGACCCTCTCACACCAAACCCACAGAGAACGAAACAGCAGCAGAG
 ACAAATGCACCTCAAAAAGAAGTCCCACACACAGTTCGAGTCAACAACCTTACAAGCCAAACCAACAAC
 TTTATCTCTTCTCTGACCCAGAGTACCAAAATGACCCCAAGGGTTCCCATTTGAGAACAAGACTATT
 GAACGCACCTTAAGTGTGGAACCTCTGGAACCTGCAGGCCAAGTCCACCCACCCTCTCTCATAAAG
 CCAACCAAGATAACCCCTTTAGGGCTTCTCAAAGCTGAAGTCTCTTGAAGACTGTGGTGCCACCACC
 ATCAAAGAAGCCAGGTACAGTGTCTTCTGGTACACAAGGCAATAACTCCACCAAGAAAGGGCCGGAG
 CAATCCGAGTTGTATGCACAACCTCAGCAAGTCTCAGTCTCAGTGGTGGACACGAGGAAAGGAAGCA
 AGCGGCCAGTCTGCGGCTGTTTGGTGACCATGACTATTGCCAGTCAATTAATTCAAAACGAAATACT
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 GGGCAGATTTGTTCTTCCACAGATTAGACAGTGTACCTGAGAGAGACTTTGGAGGCAAGCAAGCAGG
 TCTCTCTTGCAGCACAAGAAAACAGCTCCAAGACCAGGAAATCCGAGCCGAGTGAACAAGCACTTCGG
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 AATGAACAATTCTCAAACCTACCTATGTTTATAAATTCAGGACTAGCCATGGATGGCCTGTTTGATGACA
 GCGAAGATGAAAGTGATAAACTGAGCTACCCTTGGGATGGCACACAATCCTATTCATTGTTCAATGTGC
 TCCTTCTGTTCTTCTTTAACTCTCCATGTAGAGATTCTGTGTACCACCCAAATCCTTATTTTCTCAA
 AGACCCCAAAGGATGCGCTCTCGTTCAAGTCTTTTCTCGACACAGGTCGTGTTCCCGATCACCATATT
 CCAGGTCAAGATCAAGTCTCCAGGCAGTAGATCCTCTTCAAGATCCTGCTATTACTATGAGTCAAGCCA
 CTACAGACACCGCACGCACCGAAATTCCTTGTATGTGAGATCACGTTCAAGATCGCCCTACAGCCGT
 CGGCCAGGTATGACAGTACGAGGAATATCAGCACGAGAGGCTGAAGAGGGAAGAATATCGCAGAGAGT
 ATGAGAAGCGAGAGTCTGAGAGGGCCAAGCAAAGGAGAGGCAGAGGCAGAAGGCAATTGAAGAGCGCCG
 TGTGATTTATGTCGGTAAATCAGACCTGACACAACACGGACAGAAGTGAAGGACCGTTTTGAAGTTTTT
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 ATACCTGTGATGCTTTTGTCTCTTGAATGGATACACTTTGCGCAGGTCAAACGAAACTGACTTTGA
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 TTTGACCTGCTTCCACCAAGAGCAAGTATGACTCTCTGGATTTGATAGTTTACTGAAAGAAGCTCAGA
 GAAGCTTGCGCAGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212244 representing NM_013261
Red=Cloning site Green=Tags(s)

MAWDMCNQDSESVWSDIECAALVGEDQPLCPDLPELDLSELDVNDLDTDSFLGGLKWCSDQSEIISNQYN
NEPSNIFEKIDEENEANLLAVL TETLDSL PVDEDGLPSFDAL TDGDVTTDNEASPSMPDGTPPPQEAEE
PSLLKLLLLAPANTQLSYNECSGLSTQNHANHNHRIRTNPAIVKTENSWSNKAKSICQQQKQRRPCSEL
LKYLTTNDPPHTKPTENRNSRDKCTSKKKSHTQSQSQHLQAKPTTLLSLPLTPESPNDPKGSPFENKTI
ERTLSVELSGTAGLTPPTTPPHKANQDNPFRA SPKLKSSCKTVVPPPSKKPRYSESSGTQGNNSTKKGPE
QSELYAQLSKSSVLTGGHEERKTKRPSLRLFGDHDYCSINSKTEILINISQELQDSRQLENKDVSSDWQ
GQICSSTDSDQCYLRETLEASKQVSPCSTRKQLQDQEIRAELNKHFHGPSQAVFDDEADKTSELRSDFS
NEQFSKLPMFINSGLAMDGLFDDSEDESKLSYPWDGTQSYSLFNVSPCSSFNSPCRDSSVPPKSLFSQ
RPQRMRSRSSF SRHRSCSRSPYSR SRSPGSRSSSRSCYYYESSHYRHRTHRNSPLYVRSRSPYSR
RPRYDSYEEYQHERLKREEYRREYEKRESERAKQRERQQAIEERRVIYVGKIRPDTRTELDRDFEVF
GEIEECTVNLRDDGDSYGFITYRYTCDAFAALENGYTLRRSNETDFELYFCGRKQFFKSNYADLDSNSDD
FDPASTKSKYDSLDFDLSLLKEAQRSLRR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2412_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013261

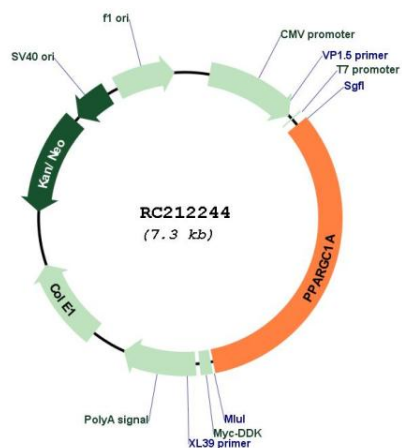
ORF Size: 2394 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_013261.5
RefSeq Size:	6317 bp
RefSeq ORF:	2397 bp
Locus ID:	10891
UniProt ID:	Q9UBK2
Cytogenetics:	4p15.2
Domains:	RRM
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Adipocytokine signaling pathway, Huntington's disease, Insulin signaling pathway
MW:	90.8 kDa
Gene Summary:	The protein encoded by this gene is a transcriptional coactivator that regulates the genes involved in energy metabolism. This protein interacts with PPARgamma, which permits the interaction of this protein with multiple transcription factors. This protein can interact with, and regulate the activities of, cAMP response element binding protein (CREB) and nuclear respiratory factors (NRFs). It provides a direct link between external physiological stimuli and the regulation of mitochondrial biogenesis, and is a major factor that regulates muscle fiber type determination. This protein may be also involved in controlling blood pressure, regulating cellular cholesterol homeostasis, and the development of obesity. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC212244