

Product datasheet for **RC210815**

Retinoic Acid Receptor gamma (RARG) (NM_000966) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Retinoic Acid Receptor gamma (RARG) (NM_000966) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RARG
Synonyms:	NR1B3; RARC
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC210815 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCACCAATAAGGAGCGACTCTTTGCGGCTGGTCCCTGGGGCTGGATCTGGCTACCCAGGGGCAG
 GTTTCCCTTCGCTTCCAGGGGCACTCAGGGGTCTCCGCCTTCGAGATGCTGAGCCCTAGCTTCCG
 GGGCTGGCCAGCCTGACCTCCCAAGGAGATGGCTCTCTGTGCGTGGAGACACAGAGACCAGCTCA
 GAGGAGATGGTGCCAGCTCGCCCTCGCCCCCTCCGCCTCTCGGGTCTACAAGCCATGCTTCGTGTGCA
 ATGACAAGTCTCTGGCTACCACTATGGGGTCAGCTCTTGTGAAGGTGCAAGGGCTTTTCGCCGAAG
 CATCCAGAAGAACATGGTGTACACGTGTACCAGGACAAAACTGTATCATCAACAAGGTGACCAGGAAT
 CGTGCCAGTACTGCCGGCTACAGAAGTCTTCAAGTGGGCATGTCCAAGGAAGCTGTGCGAAATGACC
 GGAACAAGAAGAAGAGGTGAAGGAAGAAGGGTCACCTGACAGCTATGAGCTGAGCCCTCAGTTAGA
 AGAGCTCATACCAAGGTGAGCAAGGCCATCAGGAGACTTTCCCTCGCTCTGCCAGCTGGGCAAGTAT
 ACCACGAACTCCAGTGCAGACCACCGCTGCAGCTGGATCTGGGGCTGTGGGACAAGTTCAGTGAGCTGG
 CTACCAAGTGCATCATCAAGATCGTGGAGTTTGCCAAGCGGTTGCCTGGCTTTACAGGGCTCAGATTGC
 TGACCAGTCACTCTGCTCAAAGCTGCCTGCCTAGATATCCTGATGCTGCGTATCTGCACAAGGTACACC
 CCAGAGCAGGACACCATGACCTTCTCCGACGGGCTGACCTGAACCGGACCCAGATGCACAATGCCGGCT
 TCGGGCCCTCACAGACCTTGTCTTTGCCTTGTGGGACAGTCTGCCCTGGAGATGGATGACACCGA
 GACAGGGCTGCTCAGCGCCATCTGCCTCATCTGCGGAGACCGCATGGACCTGGAGGAGCCCGAAAAAGT
 GACAAGTGCAGGAGCCACTGCTGGAAGCCCTGAGGCTGTACGCCGGCGCCGGCGGCCAGCCAGCCCT
 ACATGTTCCCAAGGATGCTAATGAAAATCACCGACCTCCGGGCATCAGCACTAAGGGAGTGAAGGGC
 CATTACTCTGAAGATGGAGATCCAGGCCGATGCCTCCCTTAATCCGAGAGATGCTGGAGAACCCTGAA
 ATGTTTGAGGATGACTCCTCGCAGCCTGGTCCCCACCCCAATGCCTCTAGCGAGGATGAGGTTCTGGG
 GCCAGGGCAAAGGGGCTGAAGTCCCCAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210815 protein sequence
 Red=Cloning site Green=Tags(s)

MATNKERLFAAGALGPGSGYPGAGFPFAFPGALRGSPPFEMLSFSFRGLGQPDLPKEMASLSVETQSTSS
 EEMVPSSPSPPPPRVYKPCFVCNDKSSGYHYGVSSCEGCKGFFRRSIQKNMYYTCHRDKNCIINKVTRN
 RCQYQRLQKCFEVGMSKEAVRNRNKKKKEVKEEGSPDSYELSPQLEELITKVSKAHQETFPQLCQLGKY
 TTNSADHRVQLDLGLWDFSELATKCIKIVEFAKRLPGFTGLSIADQITLLKAACLDILMLRICTRYT
 PEQDTMTFSDGLTLNRTQMHNAGFGPLTDLVFAFAGQLPLEMDDTETGLLSAICLICGDRMDLEEPEKV
 DKLQEPLLEALRLYARRRRPSQPYMFPRLMKITDLRGIKGAERAITLKMEIPGMPPLIREMLENPE
 MFEDDSSQPGPHPNASSEDEVGGQKGGGLKSPA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

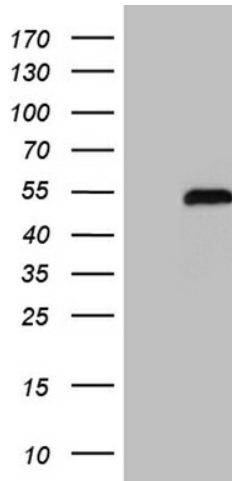
Chromatograms:

https://cdn.origene.com/chromatograms/mk6137_a02.zip

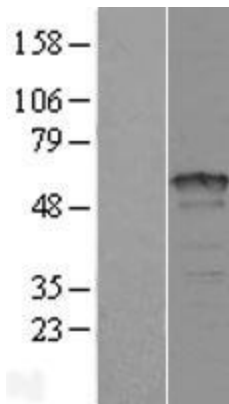
Restriction Sites:

Sgfl-Mlul

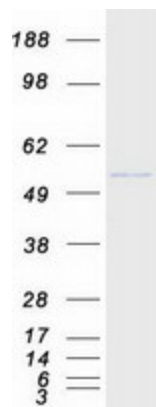
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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_000966.6
RefSeq Size:	2992 bp
RefSeq ORF:	1365 bp
Locus ID:	5916
UniProt ID:	P13631
Cytogenetics:	12q13.13
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
MW:	50.3 kDa
Gene Summary:	<p>This gene encodes a retinoic acid receptor that belongs to the nuclear hormone receptor family. Retinoic acid receptors (RARs) act as ligand-dependent transcriptional regulators. When bound to ligands, RARs activate transcription by binding as heterodimers to the retinoic acid response elements (RARE) found in the promoter regions of the target genes. In their unbound form, RARs repress transcription of their target genes. RARs are involved in various biological processes, including limb bud development, skeletal growth, and matrix homeostasis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]</p>

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RARG (Cat# RC210815, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RARG (Cat# [TA810381])(1:2000). Positive lysates [LY400354] (100ug) and [LC400354] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400354]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210815 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RARG protein (Cat# [TP310815]). The protein was produced from HEK293T cells transfected with RARG cDNA clone (Cat# RC210815) using MegaTran 2.0 (Cat# [TT210002]).