

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:	Retinoic Acid Receptor gamma
Synonyms:	NR1B3; RARC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**C

ATGGCCACCAATAAGGAGCGACTCTTTGCGGCTGGTGCCTGGGGCTGGATCTGGCTACCCAGGGGCAG
 GTTTCCCCTTCGCTTCCAGGGGCACTCAGGGGGTCTCCGCCTTCGAGATGCTGAGCCCTAGCTTCCG
 GGGCTGGGCCAGCTGACCTCCCAAGGAGATGGCCTCTCTGTCGGTGGAGACACAGAGACCAGCTCA
 GAGGAGATGGTCCCAGCTCGCCCTCGCCCCCTCCGCCTCTCGGGTCTACAAGCCATGCTTCGTGTGCA
 ATGACAAGTCTCTGGCTACCACTATGGGGTCAGCTTTGTGAAGGTGCAAGGGCTTCTTCGCCGAAG
 CATCCAGAAGAACATGGTGTACACGTGTACCGCGACAAAACTGTATCATCAACAAGGTGACCAGGAAT
 CGCTGCCAGTACTGCCGGCTACAGAAGTCTTCGAAGTGGGCATGTCCAAGGAAGCTGTGCGAAATGACC
 GGAACAAGAAGAAGAGAGGTGAAGGAAGAAGGGTCACCTGACAGCTATGAGCTGAGCCCTCAGTTAGA
 AGAGCTCATCACCAAGGTGAGCAAGGCCATCAGGAGACTTTCCCTCGCTCTGCCAGCTGGGCAAGTAT
 ACCACGAAGTCCAGTGCAGACCACCGCTGCAGCTGGATCTGGGGCTGTGGGACAAGTTCAGTGAGCTGG
 CTACCAAGTGCATCATCAAGATCGTGGAGTTTGCCAAGCGGTTGCCTGGCTTTACAGGGCTCAGCATTGC
 TGACCAGATCACTCTGCTCAAAGCTGCCTGCCTAGATATCCTGATGCTGCGTATCTGCACAAGGTACACC
 CCAGAGCAGGACACCATGACCTTCTCCGACGGGCTGACCTGAACCGGACCCAGATGCACAATGCCGGCT
 TCGGGCCCTCACAGACCTTGTCTTTGCCTTGTGTTGGCAGCTCCTGCCCTGGAGATGGATGACACCGA
 GACAGGGCTGCTCAGCGCCATCTGCCTCATCTGCGGAGACCGCATGGACCTGGAGGAGCCGAAAAAGTG
 GACAAGCTGCAGGAGCCACTGCTGGAAGCCCTGAGGCTGTACGCCGGCGCCGGCGGCCAGCCAGCCCT
 ACATGTTCCCAAGGATGCTAATGAAATCACCGACCTCCGGGCGATCAGCACTAAGGGAGCTGAAAGGGC
 CATTACTCTGAAGATGGAGATTCAGGCCGATGCCTCCCTAATCCGAGAGATGCTGGAGAACCCTGAA
 ATGTTTGAGGATGACTCCTCGCAGCCTGGTCCCCACCCAATGCCTCTAGCGAGGATGAGGTTCTGGGG
 GCCAGGGCAAAGGGGCTGAAGTCCCCAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

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

MATNKERLFAAGALGPGSGYPGAGFPFAFPALRGSPPFEMLSFSFRGLGQPDLPKEMASLSVETQSTSS
 EEMVPSPPSPPPPPRVYKPCFVCNDKSSGYHYGVSSCEGCKGFFRRSIQKNMVYTCRDKNCIINKVTRN
 RCQYCRQLQKCFEVGMSKEAVRNRNKKKKEVKEEGSPDSYELSPQLEELITKVSKAHQETFPSLCQLGKY
 TTNSSADHRVQLDLGLWDFSELATKCIKIVEFAKRLPGFTGLSIADQITLLKAACLDILMLRICTRYT
 PEQDTHMTFSDGLTLNRTQMHNAGFGPLTDLVFAFAGQLLPLEMDDTETGLLSAICLICGDRMDLEEPEKV
 DKLQEPLLEALRLYARRRRPSQPYMFPRMLMKITDLRGISTKGAERAITLKMEIPGMPPLIREMLENPE
 MFEDDSSQPGPHPNASSEDEVPGGQKGGLKSPA

TRTRPLE**QKLISEEDLA**AND**ILDYKDDDDKV**

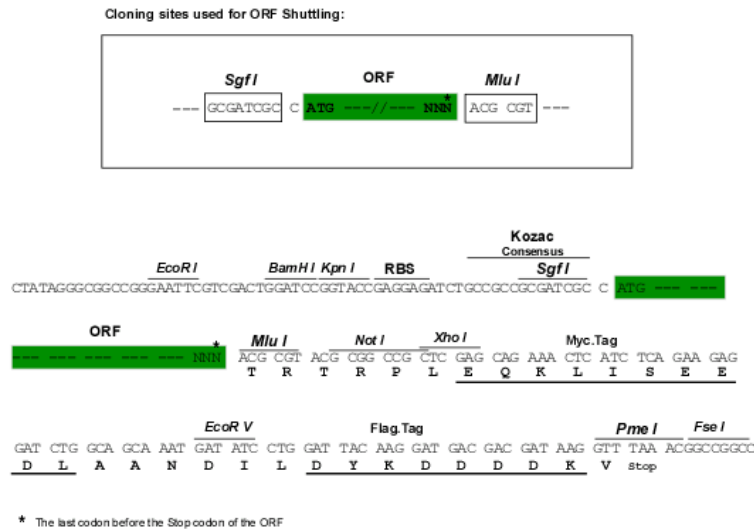
Chromatograms:

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

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000966

ORF Size: 1362 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.

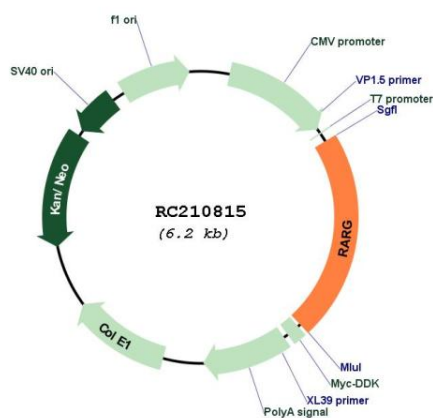
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

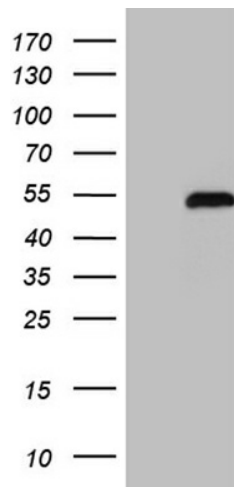
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_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:	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]

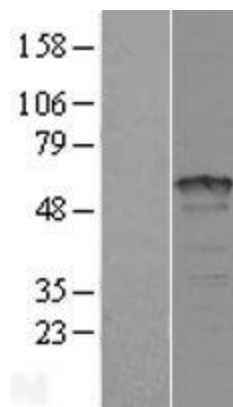
Product images:



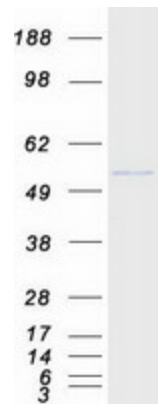
Circular map for RC210815



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]).