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Product datasheet for RC212687

Retinoic Acid Receptor gamma (RARG) (NM_001042728) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Retinoic Acid Receptor gamma (RARG) (NM_001042728) 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)

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ORF Nucleotide Sequence:

>RC212687 representing NM_001042728
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTACGACTGTATGGAAACGTTTGCCCCGGGTCCGCGACGGCTGTACGGGGCGGCCGGGCCCGGGGCCG
GCTTGCTGCGCAGAGCCACCGGCGGCTCCTGTTTCGCCGGACTTGAATCTTTTGCCTGGCCGCAACCCGC
CAGCCTGCAATCGGTGGAGACACAGAGCACCAGCTCAGAGGAGATGGTGCCCAGCTCGCCCTCGCCCCCT
CCGCCTCCTCGGGTCTACAAGCCATGCTTCGTGTGCAATGACAAGTCCTCTGGCTACCACTATGGGGTCA
GCTCTTGTGAAGGCTGCAAGGGCTTCTTTCGCCGAAGCATCCAGAAGAACATGGTGTACACGTGTCACCG
CGACAAAAACTGTATCATCAACAAGGTGACCAGGAATCGCTGCCAGTACTGCCGGCTACAGAAGTGCTTC
GAAGTGGGCATGTCCAAGGAAGCTGTGCGAAATGACCGGAACAAGAAGAAGAAAGAGGTGAAGGAAGAAG
GGTCACCTGACAGCTATGAGCTGAGCCCTCAGTTAGAAGAGCTCATCACCAAGGTCAGCAAAGCCCATCA
GGAGACTTTCCCCTCGCTCTGCCAGCTGGGCAAGTATACCACGAACTCCAGTGCAGACCACCGCGTGCAG
CTGGATCTGGGGCTGTGGGACAAGTTCAGTGAGCTGGCTACCAAGTGCATCATCAAGATCGTGGAGTTTG
CCAAGCGGTTGCCTGGCTTTACAGGGCTCAGCATTGCTGACCAGATCACTCTGCTCAAAGCTGCCTGCCT
AGATATCCTGATGCTGCGTATCTGCACAAGGTACACCCCAGAGCAGGACACCATGACCTTCTCCGACGGG
CTGACCCTGAACCGGACCCAGATGCACAATGCCGGCTTCGGGCCCCTCACAGACCTTGTCTTTGCCTTTG
CTGGGCAGCTCCTGCCCCTGGAGATGGATGACACCGAGACAGGGCTGCTCAGCGCCATCTGCCTCATCTG
CGGAGACCGCATGGACCTGGAGGAGCCCGAAAAAGTGGACAAGCTGCAGGAGCCACTGCTGGAAGCCCTG
AGGCTGTACGCCCGGCGCCGGCGGCCCAGCCAGCCCTACATGTTCCCAAGGATGCTAATGAAAATCACCG
ACCTCCGGGGCATCAGCACTAAGGGAGCTGAAAGGGCCATTACTCTGAAGATGGAGATTCCAGGCCCGAT
GCCTCCCTTAATCCGAGAGATGCTGGAGAACCCTGAAATGTTTGAGGATGACTCCTCGCAGCCTGGTCCC
CACCCCAATGCCTCTAGCGAGGATGAGGTTCCTGGGGGCCAGGGCAAAGGGGGCCTGAAGTCCCCAGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212687 representing NM_001042728
Red=Cloning site Green=Tags(s)

MYDCMETFAPGPRRLYGAAGPGAGLLRRATGGSCFAGLESFAWPQPASLQSVETQSTSSEEMVPSSPSPP
PPPRVYKPCFVCNDKSSGYHYGVSSCEGCKGFFRRSIQKNMVYTCHRDKNCIINKVTRNRCQYCRLQKCF
EVGMSKEAVRNDRNKKKKEVKEEGSPDSYELSPQLEELITKVSKAHQETFPSLCQLGKYTTNSSADHRVQ
LDLGLWDKFSELATKCIIKIVEFAKRLPGFTGLSIADQITLLKAACLDILMLRICTRYTPEQDTMTFSDG
LTLNRTQMHNAGFGPLTDLVFAFAGQLLPLEMDDTETGLLSAICLICGDRMDLEEPEKVDKLQEPLLEAL
RLYARRRRPSQPYMFPRMLMKITDLRGISTKGAERAITLKMEIPGPMPPLIREMLENPEMFEDDSSQPGP
HPNASSEDEVPGGQGKGGLKSPA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

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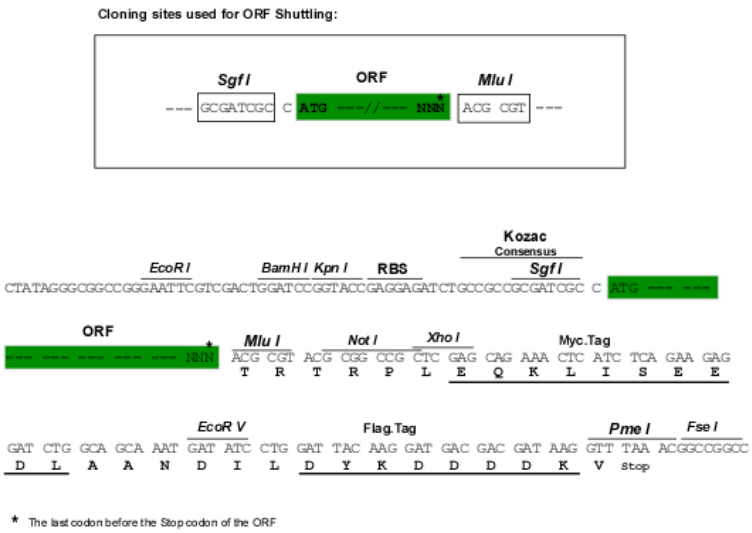
Cloning Scheme:



ACCN: NM_001042728

ORF Size: 1329 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:
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_001042728.3

RefSeq Size: 2740 bp

RefSeq ORF: 1332 bp

Locus ID: 5916

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UniProt ID: P13631

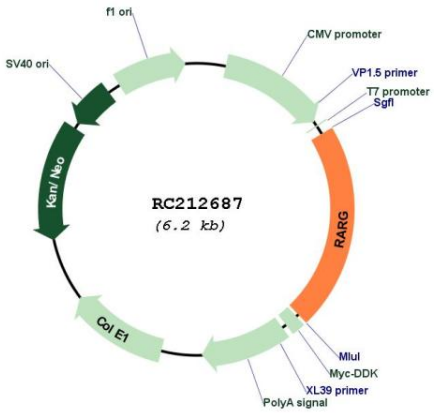
Cytogenetics: 12q13.13

Protein Families: Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

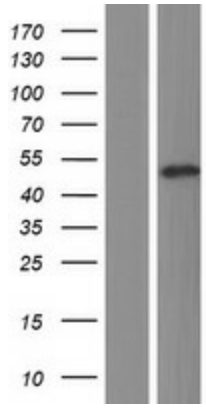
MW: 49.1 kDa

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 RC212687



Western blot validation of overexpression lysate (Cat# [LY420799]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212687 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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