

Product datasheet for **RG214618**

ROR alpha (RORA) (NM_002943) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	ROR alpha
Synonyms:	IDDECA; NR1F1; ROR1; ROR2; ROR3; RZR-ALPHA; RZRA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG214618 representing NM_002943
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGAATGAGGGGGCCCCAGGAGACAGTGACTTAGAGACTGAGGCAAGAGTGCCGTGGTCAATCATGGGTC
 ATTGTCTTCGAACTGGACAGGCCAGAATGTCTGCCACACCCACCTGCAGGTGAAGGAGCCAGAAGCTC
 TTCAACCTGTAGCTCCCTGAGCAGGCTGTTCTGGTCTCAACTTGAGCACATAAACTGGGATGGAGCCACA
 GCCAAGAACTTTATTAATTTAAGGGAGTCTTCTCTTTCTGCTCCCTGCATTGAGAAAAGCTCAAATTG
 AAATTATTCATGCAAGATCTGTGGAGACAAATCATCAGGAATCCATTATGGTGTCAATTACATGTGAAGG
 CTGCAAGGGCTTTTTCAGGAGAAGTCAGCAAAAGCAATGCCACCTACTCCTGTCTCGTCAGAAGAACTGT
 TTGATTGATCGAACCAGTAGAAACCGCTGCCAACACTGTCGATTACAGAAATGCCTTGCCGTAGGGATGT
 CTCGAGATGCTGTAAAATTTGGCCGAATGTCAAAAAGCAGAGAGACAGCTTGTATGCAGAAGTACAGAA
 ACACCGGATGCAGCAGCAGCAGCGCACCACCAGCAGCAGCCTGGAGAGGCTGAGCCGCTGACGCCACC
 TACAACATCTCGGCCAACGGGCTGACGGAACCTTACGACGACCTCAGTAACTACATTGACGGGCACACCC
 CTGAGGGGAGTAAGGCAGACTCCGCCGTGACGAGCTTCTACCTGGACATACAGCCTTCCCCAGACCAGTC
 AGGTCTTGATATCAATGGAATCAAACCAGAACCAATATGTGACTACACACCAGCATCAGGCTTCTTTCCC
 TACTGTTCTGTTACCAACGGCGAGACTTCCCCAACTGTGTCATGGCAGAATTAGAACACCTTGCACAGA
 ATATATCTAAATCGCATCTGGAACCTGCCAATACTTGAGAGAAGAGCTCCAGCAGATAACGTGGCAGAC
 CTTTTTACAGGAAGAAATTGAGAACTATCAAAACAAGCAGCGGGAGGTGATGTGGCAATTGTGTGCCATC
 AAAATTACAGAAGCTATACAGTATGTGGTGGAGTTTGCCAAACGCATTGATGGATTTATGGAACGTGTGC
 AAAATGATCAAATTGTGCTTCTAAAAGCAGGTTCTCTAGAGGTGGTGTATCAGAATGTGCCGTGCCTT
 TGACTCTCAGAACACACCGTGTACTTTGATGGGAAAGTATGCCAGCCCCGACGCTTCAAATCCTTAGGT
 TGTGAAGACTTTATTAGCTTTGTGTTGAATTTGAAAAGAGTTTATGTTCTATGCACCTGACTGAAGATG
 AAATTGCATTATTTTCTGCAATTTGTACTGATGTGAGCAGATCGCTCATGGCTGCAAGAAAAGGTAAGTAA
 TGAAAACTGCAACAGAAAATTCAGTAGCTCTTCAACACGTCCTACAGAAGATCACCGAGAAGATGGA
 ATACTAACAAAGTTAATATGCAAGGTGTCTACATTAAAGAGCCTTATGTGGACGACATACAGAAAAGCTAA
 TGGCATTAAAGCAATATACCCAGACATTGTGCGACTTCATTTCTCCATTATACAAGGAGTTGTTTAC
 TTCAGAATTGAGCCAGCAATGCAATTGATGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG214618 representing NM_002943
 Red=Cloning site Green=Tags(s)

MNEGAPGDSLETEARVPWSIMGHCLRTGQARMSATPTPAGEGARSSSTCSSLSRLFWSQLEHINWDGAT
 AKNFINLREFFSFLPALRKAQIEIIPCKICGDKSSGIHYGVITCEGCKGFFRRSQSNATYSCPRQKNC
 LIDRTSRNRCQHRLQKCLAVGMSRDAVKFGRMSKKQRDSL YAEVQKHRMQQQQRDHQQQPGEAEPLTPT
 YNISANGL TELHDDL SNYIDGHTPEGSKADSAVSSFYLDIQPSPDQSGLDINGIKPEPICDYTPASGFFP
 YCSFTNGETSPTVSMAELEHLAQNISKSHLETQYLREELQQITWQTFLEEEIENYQNKQREVMWQLCAI
 KITEAIQYVVEFAKRIDGMELCQNDQIVLLKAGSLEVVFIRMCRAFD SQNNTVYFDGKYASPDVFKSLG
 CEDFISFVFEFGKSLCSMHL TEDEIAL FSAFVLSADRSWLQEKVKIEKLQQKIQLALQHV LQKNHREDG
 ILTKLICKVSTLRALCGRHTEKLMFAKAIYPDIVRLHFPL YKELFTSEFEPAMQIDG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002943

ORF Size: 1644 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.

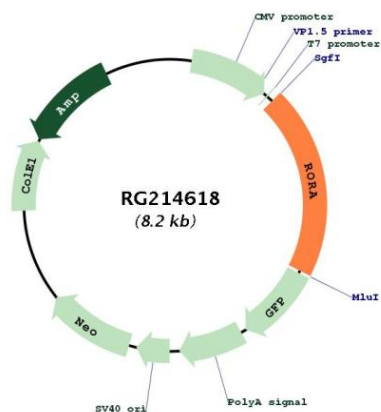
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<u>NM_002943.3, NP_002934.1</u>
RefSeq Size:	1996 bp
RefSeq ORF:	1647 bp
Locus ID:	6095
UniProt ID:	<u>P35398</u>
Cytogenetics:	15q22.2
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
Gene Summary:	The protein encoded by this gene is a member of the NR1 subfamily of nuclear hormone receptors. It can bind as a monomer or as a homodimer to hormone response elements upstream of several genes to enhance the expression of those genes. The encoded protein has been shown to interact with NM23-2, a nucleoside diphosphate kinase involved in organogenesis and differentiation, as well as with NM23-1, the product of a tumor metastasis suppressor candidate gene. Also, it has been shown to aid in the transcriptional regulation of some genes involved in circadian rhythm. Four transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Feb 2014]

Product images:



Circular map for RG214618