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Product datasheet for RG232348

Estrogen Related Receptor gamma (ESRRG) (NM_001243506) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Related Receptor gamma (ESRRG) (NM_001243506) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Estrogen Related Receptor gamma
Synonyms:	ERR-gamma; ERR3; ERRg; ERRgamma; NR3B3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG232348 representing NM_001243506
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGTGTTTAAAAGTGGGCATGCTGAAAGAAGGGGTGCGTCTTGACAGAGTACGTGGAGGTCGGCAGA
AGTACAAGCGCAGGATAGATGCGGAGAACAGCCCATACCTGAACCCTCAGCTGGTTCAGCCAGCCAAAAA
GCCATATAACAAGATTGTCTCACATTTGTTGGTGGCTGAACCGGAGAAGATCTATGCCATGCCTGACCCT
ACTGTCCCCGACAGTGACATCAAAGCCCTCACTACACTGTGTGACTTGGCCGACCGAGAGTTGGTGGTTA
TCATTGGATGGGCGAAGCATATTCCAGGCTTCTCCACGCTGTCCCTGGCGGACCAGATGAGCCTTCTGCA
GAGTGCTTGGATGGAAATTTTGATCCTTGGTGTCGTATACCGGTCTCTTTCGTTTGAGGATGAACTTGTC
TATGCAGACGATTATATAATGGACGAAGACCAGTCCAAATTAGCAGGCCTTCTTGATCTAAATAATGCTA
TCCTGCAGCTGGTAAAGAAATACAAGAGCATGAAGCTGGAAAAAGAAGAATTTGTCACCCTCAAAGCTAT
AGCTCTTGCTAATTCAGACTCCATGCACATAGAAGATGTTGAAGCCGTTCAGAAGCTTCAGGATGTCTTA
CATGAAGCGCTGCAGGATTATGAAGCTGGCCAGCACATGGAAGACCCTCGTCGAGCTGGCAAGATGCTGA
TGACACTGCCACTCCTGAGGCAGACCTCTACCAAGGCCGTGCAGCATTTCTACAACATCAAACTAGAAGG
CAAAGTCCCAATGCACAAACTTTTTTTGGAAATGTTGGAGGCCAAGGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

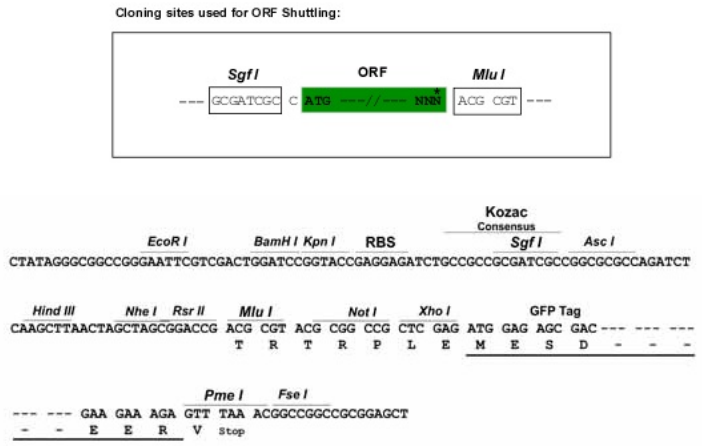
>RG232348 representing NM_001243506
Red=Cloning site Green=Tags(s)

MKCLKVGMLKEGVRLDRVRGGRQKYKRRIDAENSPYLNPQLVQPAKKPYNKIVSHLLVAEPEKIYAMPDP
TVPDSDIKALTTLCDLADRELVVIIGWAKHIPGFSTLSLADQMSLLQSAWMEILILGVVYRSLSFEDELV
YADDYIMDEDQSKLAGLLDLNNAILQLVKKYKSMKLEKEEFVTLKAIALANSDSMHIEDVEAVQKLQDVL
HEALQDYEAGQHMEDPRRAGKMLMTLPLLRQTSTKAVQHFYNIKLEGKVPMHKLFLEMLEAKV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001243506

ORF Size: 819 bp

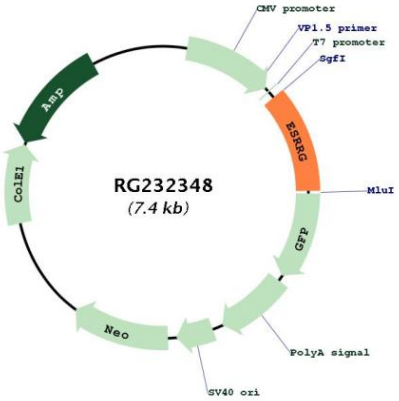
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
RefSeq:	NM_001243506.2
RefSeq Size:	4846 bp
RefSeq ORF:	822 bp
Locus ID:	2104
UniProt ID:	P62508
Cytogenetics:	1q41
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
Gene Summary:	This gene encodes a member of the estrogen receptor-related receptor (ESRR) family, which belongs to the nuclear hormone receptor superfamily. All members of the ESRR family share an almost identical DNA binding domain, which is composed of two C4-type zinc finger motifs. The ESRR members are orphan nuclear receptors; they bind to the estrogen response element and steroidogenic factor 1 response element, and activate genes controlled by both response elements in the absence of any ligands. The ESRR family is closely related to the estrogen receptor (ER) family. They share target genes, co-regulators and promoters, and by targeting the same set of genes, the ESRRs seem to interfere with the ER-mediated estrogen response in various ways. It has been reported that the family member encoded by this gene functions as a transcriptional activator of DNA cytosine-5-methyltransferases 1 (Dnmt1) expression by direct binding to its response elements in the DNMT1 promoters, modulates cell proliferation and estrogen signaling in breast cancer, and negatively regulates bone morphogenetic protein 2-induced osteoblast differentiation and bone formation. Multiple alternatively spliced transcript variants have been identified, which mainly differ at the 5' end and some of which encode protein isoforms differing in the N-terminal region. [provided by RefSeq, Aug 2011]

Product images:



Circular map for RG232348