

## Product datasheet for **RC232714**

### Estrogen Related Receptor gamma (ESRRG) (NM\_001243509) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Related Receptor gamma (ESRRG) (NM_001243509) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Estrogen Related Receptor gamma
Synonyms:	ERR-gamma; ERR3; ERRg; ERRgamma; NR3B3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC232714 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCAAACAAAGATCGACACATTGATTCCAGCTGTTCTGCTTTCATCAAGACGGAACCTCCAGCCCAG  
 CCTCCCTGACGGACAGCGTCAACCACCACAGCCCTGGTGGCTCTTCAGACGCCAGTGGGAGCTACAGTTC  
 AACCATGAATGGCCATCAGAACGGACTTACTCGCCACCTCTCTACCTTCTGCTCCTATCCTGGGAGGT  
 AGTGGGCTGTCAGGAACTGTATGATGACTGCTCCAGCACCATTGTTGAAGATCCCAGACCAAGTGTG  
 AATACATGCTCAACTCGATGCCAAGAGACTGTGTTTAGTGTGGTGACATCGTTCTGGGTACCACTA  
 TGGGGTAGCATCATGTGAAGCCTGCAAGGCATTCTTCAAGAGGACAATCAAGGCAATATAGAATACAGC  
 TGCCCTGCCACGAATGAATGTGAAATCACAAAGCGCAGACGTAATCCTGCCAGGCTTGCCGCTTCATGA  
 AGTGTAAAAGTGGGCATGCTGAAAGAAGGGGTGCGTCTTGACAGAGTACGTGGAGGTCCGCAGAAAGTA  
 CAAGCGCAGGATAGATGCGGAGAACAGCCATACCTGAACCTCAGCTGGTTCAGCCAGCAAAAAGCCA  
 TATAACAAGATTGCTCACATTTGTTGGTGGCTGAACCGGAGAAGATCTATGCCATGCCTGACCCTACTG  
 TCCCCGACAGTGACATCAAGCCCTCACTACACTGTGTGACTTGGCCGACCGAGAGTTGGTGGTTATCAT  
 TGGATGGGCGAAGCATATTCAGGCTTCTCCACGCTGTCCCTGGCGGACCAGATGAGCCTTCTGCAGAGT  
 GCTTGGATGGAAATTTTATCCTTGGTGTGCGTATACCGGTCTCTTTGCTTTGAGGATGAACCTGTCTATG  
 CAGACGATTATATAATGGACGAAGACCAGTCCAAATTAGCAGGCCTTCTTGATCTAAATAATGCTATCCT  
 GCAGCTGGTAAAGAAATACAAGAGCATGAAGCTGGAAAAAGAAGAATTTGTCACCCTCAAAGCTATAGCT  
 CTTGCTAATTGACTCCATGCACATAGAAGATGTTGAAGCCGTTGAGAAGCTTCAGGATGCTTACATG  
 AAGCGCTGCAGGATTATGAAGCTGGCCAGCACATGGAAGACCCCTGTCGAGCTGGCAAGATGCTGATGAC  
 ACTGCCACTCCTGAGGCAGACCTCTACCAAGGCCGTGCAGCATTCTACAACATCAAACATAGAAGGCAAA  
 GTCCAATGCACAACTTTTTTGGAAATGTTGGAGGCCAAGGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC232714 protein sequence  
 Red=Cloning site Green=Tags(s)

MSNKDRHIDSSCSSFIKTEPSSPASLTDSVNHSPGGSSDASGSYSSTMNGHQGLDSPPLYPSAPILGG  
 SGPVRKLYDDCSSTIVEDPQTKCEYMLNSMPKRLCLVCGDIASGYHYGVASCEACKAFFKRTIQGNI EYS  
 CPATNECEITKRRRKSCQACRFMKCLKVGMKEGVRLDRVRGGGRQKYKRRIDAENSPYLNQLVQPAKKP  
 YNKIVSHLLVAEPEKIYAMPDPTVPDSIKAL TTLCDLADREL VVIIGWAKHIPGFSTLSLADQMSLLQS  
 AWMEILILGVVYRSLSFEDEL VYADDYIMDEDQSKLAGLLDLNNAILQLVKKYKSMKLEKEEFVTLKAIA  
 LANSDSMHIEDVEAVQKLQDVLHEALQDYEAGQHMEDPRRAGKMLMPLLRQTSTKAVQHFYNIKLEK  
 VPMHKL FLEMLEAKV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

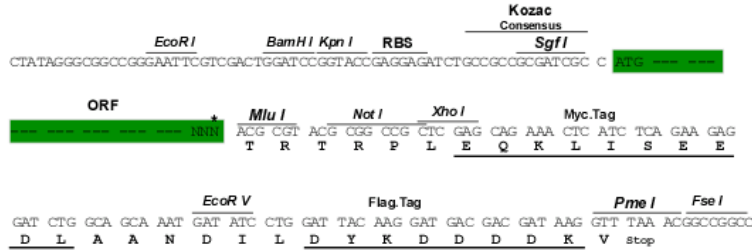
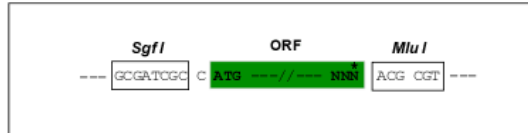
[https://cdn.origene.com/chromatograms/mk8026\\_d04.zip](https://cdn.origene.com/chromatograms/mk8026_d04.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001243509

**ORF Size:** 1305 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\\_001243509.2](#)
**RefSeq Size:** 5714 bp

**RefSeq ORF:** 1308 bp

**Locus ID:** 2104

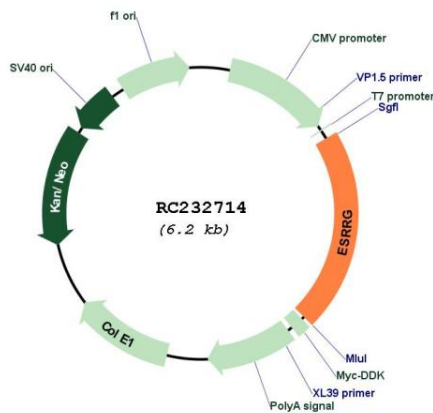
**UniProt ID:** [P62508](#)
**Cytogenetics:** 1q41

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

**MW:** 48.6 kDa

**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 RC232714