

Product datasheet for SC330133

OriGene Technologies, Inc.

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Estrogen Related Receptor gamma (ESRRG) (NM 001243511) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Estrogen Related Receptor gamma (ESRRG) (NM_001243511) Human Untagged Clone

Tag: Tag Free
Symbol: ESRRG

Synonyms: ERR-gamma; ERR3; ERRg; ERRgamma; NR3B3

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC330133 representing NM_001243511.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

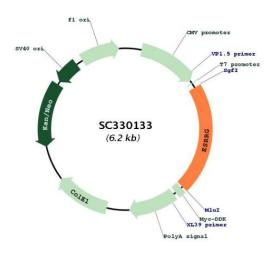
ATGTCAAACAAAGATCGACACATTGATTCCAGCTGTTCGTCCTTCATCAAGACGGAACCTTCCAGCCCA GCCTCCCTGACGGACAGCGTCAACCACCACAGCCCTGGTGGCTCTTCAGACGCCAGTGGGAGCTACAGT TCAACCATGAATGGCCATCAGAACGGACTTGACTCGCCACCTCTCTACCCTTCTGCTCCTATCCTGGGA GGTAGTGGGCCTGTCAGGAAACTGTATGATGACTGCTCCAGCACCATTGTTGAAGATCCCCAGACCAAG TGTGAATACATGCTCAACTCGATGCCCAAGAGACTGTGTTTAGTGTGTGGTGACATCGCTTCTGGGTAC CACTATGGGGTAGCATCATGTGAAGCCTGCAAGGCATTCTTCAAGAGAGACAATTCAAGGCAATATAGAA TACAGCTGCCCTGCCACGAATGAATGTGAAATCACAAAGCGCAGACGTAAATCCTGCCAGGCTTGCCGC TTCATGAAGTGTTTAAAAGTGGGCATGCTGAAAGAAGGGGTGCGTCTTGACAGAGTACGTGGAGGTCGG AAAAAGCCATATAACAAGATTGTCTCACATTTGTTGGTGGCTGAACCGGAGAAGATCTATGCCATGCCT GTGGTTATCATTGGATGGGCGAAGCATATTCCAGGCTTCTCCACGCTGTCCCTGGCGGACCAGATGAGC CTTCTGCAGAGTGCTTGGATGGAAATTTTGATCCTTGGTGTCGTATACCGGTCTCTTTCGTTTGAGGAT GAACTTGTCTATGCAGACGATTATATAATGGACGAAGACCAGTCCAAATTAGCAGGCCTTCTTGATCTA AATAATGCTATCCTGCAGCTGGTAAAGAAATACAAGAGCATGAAGCTGGAAAAAGAAGAATTTGTCACC CTCAAAGCTATAGCTCTTGCTAATTCAGACTCCATGCACATAGAAGATGTTGAAGCCGTTCAGAAGCTT CAGGATGTCTTACATGAAGCGCTGCAGGATTATGAAGCTGGCCAGCACATGGAAGACCCTCGTCGAGCT GGCAAGATGCTGATGACACTGCCACTCCTGAGGCAGACCTCTACCAAGGCCGTGCAGCATTTCTACAAC ATCAAACTAGAAGGCAAAGTCCCAATGCACAAACTTTTTTTGGAAATGTTGGAGGCCAAGGTC<mark>TGA</mark>

Restriction Sites: Sgfl-Mlul





Plasmid Map:



ACCN: NM_001243511

Insert Size: 1308 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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.

RefSeg: NM 001243511.1

RefSeq Size: 5132 bp
RefSeq ORF: 1308 bp
Locus ID: 2104



UniProt ID: P62508

Cytogenetics: 1q41

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

RefSeq, Aug 2011]

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

Transcript Variant: This variant (11) uses an alternate exon structure in the 5' UTR and 5' coding region, compared to variant 1. This results in a distinct 5' UTR and use of a downstream in-frame start codon. The encoded isoform (2) has a shorter N-terminus compared to isoform 1. Variants 2-4, 9-15, and 17-21 encode the same isoform.