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# Product datasheet for SC330129

## Estrogen Related Receptor gamma (ESRRG) (NM_001243506) Human Untagged Clone

### Product data:

**Product Type:** Expression Plasmids

**Product Name:** Estrogen Related Receptor gamma (ESRRG) (NM_001243506) Human Untagged Clone

**Tag:** Tag Free

**Symbol:** ESRRG

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

**Vector:** pCMV6-Entry (PS100001)

**Fully Sequenced ORF:**

>SC330129 representing NM_001243506.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGAAGTGTTTAAAAGTGGGCATGCTGAAAGAAGGGGTGCGTCTTGACAGAGTACGTGGAGGTCGGCAG
AAGTACAAGCGCAGGATAGATGCGGAGAACAGCCCATACCTGAACCCTCAGCTGGTTCAGCCAGCCAAA
AAGCCATATAACAAGATTGTCTCACATTTGTTGGTGGCTGAACCGGAGAAGATCTATGCCATGCCTGAC
CCTACTGTCCCCGACAGTGACATCAAAGCCCTCACTACACTGTGTGACTTGGCCGACCGAGAGTTGGTG
GTTATCATTGGATGGGCGAAGCATATTCCAGGCTTCTCCACGCTGTCCCTGGCGGACCAGATGAGCCTT
CTGCAGAGTGCTTGGATGGAAATTTTGATCCTTGGTGTCGTATACCGGTCTCTTTCGTTTGAGGATGAA
CTTGTCTATGCAGACGATTATATAATGGACGAAGACCAGTCCAAATTAGCAGGCCTTCTTGATCTAAAT
AATGCTATCCTGCAGCTGGTAAAGAAATACAAGAGCATGAAGCTGGAAAAAGAAGAATTTGTCACCCTC
AAAGCTATAGCTCTTGCTAATTCAGACTCCATGCACATAGAAGATGTTGAAGCCGTTCAGAAGCTTCAG
GATGTCTTACATGAAGCGCTGCAGGATTATGAAGCTGGCCAGCACATGGAAGACCCTCGTCGAGCTGGC
AAGATGCTGATGACACTGCCACTCCTGAGGCAGACCTCTACCAAGGCCGTGCAGCATTTCTACAACATC
AAACTAGAAGGCAAAGTCCCAATGCACAAACTTTTTTTGGAAATGTTGGAGGCCAAGGTCTGA

**Restriction Sites:** SgfI-MluI

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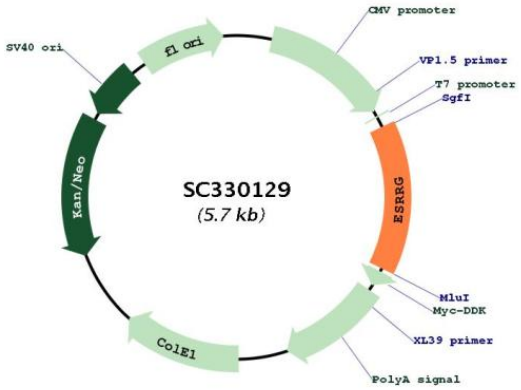
Plasmid Map:




| | |
|---|---|
| **ACCN:** | NM_001243506 |
| **Insert Size:** | 822 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). |

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|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001243506.1 |
| **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 |
| **MW:** | 31.1 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]<br>Transcript Variant: This variant (7) lacks two exons from the 5' end but has two alternate 5' exons and uses a downstream AUG start codon, compared to variant 1. The resulting isoform (4) is shorter at the N-terminus, compared to isoform 1. |

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