

Product datasheet for **SC318946**

Estrogen Receptor 1 (ESR1) (NM_001122741) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Receptor 1 (ESR1) (NM_001122741) Human Untagged Clone
Tag:	Tag Free
Symbol:	ESR1
Synonyms:	ER; Era; ESR; ESRA; ESTRR; NR3A1
Vector:	<u>pCMV6 series</u>



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001122741, the custom clone sequence may differ by one or more nucleotides

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ATGACCATGACCTCCACACCAAAGCATCTGGGATGGCCCTACTGCATCAGATCCAAGGG
AACGAGCTGGAGCCCCTGAACCGTCCGCAGCTCAAGATCCCCCTGGAGCGGCCCTGGGC
GAGGTGTACCTGGACAGCAGCAAGCCCGCCGTGTACAACACCCCGAGGGCGCCGCTAC
GAGTTCAACGCCCGCCGCCGCCAACGCGCAGGTCTACGGTCAGACCGGCCCTCCCTAC
GGCCCCGGTCTGAGGCTGCGGGCTTCGGCTCCAACGGCTGGGGGGTTCCCCCACTC
AACAGCGTGTCTCCGAGCCCGTGTACTGACTGCACCCGCGCCGAGCTGTCGCCTTTC
CTGCAGCCCCACGGCCAGCAGGTGCCCTACTACCTGGAGAACGAGCCAGCGGCTACAG
GTGCGCGAGGCGGCCCGCCGGCATTCTACAGGCCAAATTCAGATAATCGACGCCAGGGT
GGCAGAGAAAGATTGGCCAGTACCAATGACAAGGGAAGTATGGCTATGGAATCTGCCAAG
GAGACTCGCTACTGTGCAGTGTGCAATGACTATGCTTCAGGCTACCATTATGGAGTCTGG
TCCTGTGAGGGCTGCAAGGCCTTCTTCAAGAGAAGTATCAAGGACATAACGACTATATG
TGTCACGCCCAACAGTGCACCATTGATAAAAAACAGGAGGAAGAGCTGCCAGGCCTGC
CGCTCCGCAAAATGCTACGAAGTGGGAATGATGAAAGGTGGGATACGAAAAGACCGAAGA
GGAGGGAGAATGTTGAAACACAAGCGCCAGAGAGATGATGGGGAGGGCAGGGGTGAAGTG
GGTCTGCTGGAGACATGAGAGCTGCCAACCTTTGGCCAAGCCCGCTCATGATCAAAACGC
TCTAAGAAGAAGCCTGGCCTTGTCCCTGACGGCCGACCAGATGGTCAGTGCCTTGTG
GATGCTGAGCCCCCATACTCTATTCCGAGTATGATCCTACCAGACCCTTCAGTGAAGCT
TCGATGATGGGCTTACTGACCAACCTGGCAGACAGGGAGCTGGTTCACATGATCAACTGG
GCGAAGAGGGTGCCAGGCTTTGTGGATTGACCCTCCATGATCAGGTCCACCTTCTAGAA
TGTGCCTGGCTAGAGATCCTGATGATTGGTCTCGTCTGGCGCTCCATGGAGCACCAGGG
AAGCTACTGTTTGCTCCTAACTTGCTCTTGACAGGAACCAGGGAAAATGTGTAGAGGGC
ATGGTGGAGATCTTCGACATGCTGCTGGCTACATCATCTCGGTTCCGCATGATGAATCTG
CAGGGAGAGGAGTTTGTGTGCCTCAAATCTATTATTTTGTCTAATTCTGGAGTGTACACA
TTTCTGTCCAGCACCTGAAAGTCTCTGGAAGAGAAGGACCATATCCACCGAGTCTGGAC
AAGATCACAGACACTTTGATCCACCTGATGGCCAAGGCAGGCCTGACCCTGCAGCAGCAG
CACCAGCGGTGGCCAGCTCCTCCTCATCCTCTCCACATCAGGCACATGAGTAACAAA
GGCATGGAGCATCTGTACAGCATGAAGTGAAGAACGTGGTGGCCCTCTATGACCTGCTG
CTGGAGATGCTGGACGCCACCGCTACATGCGCCCACTAGCCGTGGAGGGGCATCCGTG
GAGGAGACGGACCAAGCCACTTGGCCACTGCGGGCTCTACTTCATCGCATTCTTGCAA
AAGTATTACATCACGGGGAGGCAGAGGGTTTCCCTGCCACGGTC

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Restriction Sites: Please inquire

ACCN: NM_001122741

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001122741.1](#), [NP_001116213.1](#)

RefSeq Size: 6314 bp

RefSeq ORF: 1788 bp

Locus ID: 2099

UniProt ID: [P03372](#)

Cytogenetics: 6q25.1-q25.2

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

Gene Summary: This gene encodes an estrogen receptor and ligand-activated transcription factor. The canonical protein contains an N-terminal ligand-independent transactivation domain, a central DNA binding domain, a hinge domain, and a C-terminal ligand-dependent transactivation domain. The protein localizes to the nucleus where it may form either a homodimer or a heterodimer with estrogen receptor 2. The protein encoded by this gene regulates the transcription of many estrogen-inducible genes that play a role in growth, metabolism, sexual development, gestation, and other reproductive functions and is expressed in many non-reproductive tissues. The receptor encoded by this gene plays a key role in breast cancer, endometrial cancer, and osteoporosis. This gene is reported to have dozens of transcript variants due to the use of alternate promoters and alternative splicing, however, the full-length nature of many of these variants remain uncertain. [provided by RefSeq, Jul 2020]

Transcript Variant: This variant (3) differs in the 5' UTR and uses a different promoter, compared to variant 1. Variants 1-4 all encode the same isoform 1.