

## Product datasheet for **SC318945**

### Estrogen Receptor 1 (ESR1) (NM\_001122740) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Receptor 1 (ESR1) (NM_001122740) Human Untagged Clone
Tag:	Tag Free
Symbol:	ESR1
Synonyms:	ER; Era; ESR; ESRA; ESTRR; NR3A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >SC318945 representing NM\_001122740.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGACCATGACCCTCCACACCAAAGCATCTGGGATGGCCCTACTGCATCAGATCCAAGGGAACGAGCTG
GAGCCCCGACCGTCCGACGCTCAAGATCCCCCTGGAGCGGCCCTGGCGGAGGTGTACCTGGACAGC
AGCAAGCCCGCCGTGTACAACCTACCCCGAGGGCGCCCTACGAGTTCAACGCCGCGGCCGCCAAC
GCGCAGGTCTACGGTACAGCCGGCTCCCTACGGCCCCGGGTCTGAGGCTGCGGCGTTCGGCTCCAAC
GGCCTGGGGGTTTCCCCCACTCAACAGCGTGTCTCCGAGCCGCTGATGCTACTGCACCCGCCCGC
CAGCTGTCGCCTTCTGACGCCCCACGGCCAGCAGGTGCCCTACTACCTGGAGAACGAGCCAGCGGC
TACACGGTGCAGGAGGCCCGCCCGGCATTCTACAGGCCAAATTCAGATAATCGACGCCAGGGTGGC
AGAGAAAGATTGGCCAGTACCAATGACAAGGGAAGTATGGCTATGGAATCTGCCAAGGAGACTCGCTAC
TGTGCAGTGTCAATGACTATGCTTACGGCTACCATTATGGAGTCTGGTCTGTGAGGGCTGCAAGGCC
TTCTTCAAGAGAAGTATCAAGGACATAACGACTATATGTGTCCAGCCACCAACCAGTGCACCATTGAT
AAAAACAGGAGGAAGAGCTGCCAGGCCTCCCGCTCCGCAATGTACGAAGTGGGAATGATGAAAGGT
GGGATACGAAAAGACCGAAGAGGAGGGAGAATGTTGAAACACAAGCGCCAGAGAGATGATGGGGAGGGC
AGGGGTGAAGTGGGGTCTGCTGGAGACATGAGAGCTGCCAACCTTGGCCAAGCCCGCTCATGATCAA
CGCTCTAAGAAGAACAGCCTGGCCTTGTCCCTGACGGCCGACCAGATGGTCAGTGCCTTGTGGATGCT
GAGCCCCCACTACTTATCCGAGTATGATCCTACCAGACCTTCAGTGAAGCTTCGATGATGGGCTTA
CTGACCAACCTGGCAGACAGGGAGCTGGTTCACATGATCAACTGGGCGAAGAGGGTGCAGGCTTTGTG
GATTTGACCCTCCATGATCAGGTCCACCTTCTAGAATGTGCCTGGCTAGAGATCCTGATGATTGGTCTC
GCTGGCGCTCCATGGAGCACCCAGGGAAGCTACTGTTTGTCTAACTTGCTCTTGACAGGAACCCAG
GGAAAATGTGTAGAGGGCATGGTGGAGATCTTCGACATGCTGCTGGCTACATCATCTCGGTTCCGCATG
ATGAATCTGCAGGGAGAGGAGTTTGTGTGCCTCAAATCTATTATTTTGTGTAATTCTGGAGTGATACACA
TTTCTGTCCAGCACCTGAAGTCTCTGGAAGAGAAGGACCATATCCACCGAGTCTGGACAAGATCACA
GACACTTTGATCCACCTGATGGCCAAGGCAGGCCCTGACCTGCAGCAGCAGCACCAGCGGCTGGCCAG
CTCCTCTCATCTCTCCACATCAGGCACATGAGTAACAAGGCATGGAGCATCTGTACAGCATGAAG
TGCAAGAACGTGGTGGCCCTCTATGACCTGCTGCTGGAGATGCTGGACGCCACCAGCCTACATGCCCC
ACTAGCCGTGGAGGGCATCCGTGGAGGAGACGGACCAAGCCACTTGGCCACTGCGGGCTACTTCA
TCGCATTCCTTGAAAAGTATTACATCACGGGGGAGGCAGAGGGTTTCCCTGCCACGGTCTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**Plasmid Map:** □

**ACCN:** NM\_001122740

**Insert Size:** 1788 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).

**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\\_001122740.1](#)

**RefSeq Size:** 6357 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

**MW:** 66.2 kDa

**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 (2) differs in the 5' UTR and uses a different promoter, compared to variant 1. Variants 1-4 all encode the same isoform 1.