

## Product datasheet for **MC228048**

### **Esr1 (NM\_001302533) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Esr1 (NM_001302533) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Esr1
Synonyms:	E; ER; ER-; ER-alpha; ERa; ERalpha; ER[; Es; ESR; Estr; Estra; Nr; Nr3a1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC228048 representing NM\_001302533  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACCATGACCCTTACACCAAAGCCTCGGGAATGGCCTTGCTGCACCAGATCCAAGGGAACGAGCTGG  
 AGCCCTCAACCGCCCGCAGCTCAAGATGCCATGGAGAGGGCCCTGGGCGAGGTATACGTGGACAACAG  
 CAAGCCCACTGTGTTCAACTACCCGAGGGCGCCGCTACGAGTTCAACGCCGCCGCCGCCGCCGCC  
 GCCGCTCGGCGCCGGTCTACGGCCAGTCGGGCATCGCCTACGGCCCCGGGTGGAGGCGGCCGCCCTTCA  
 GTGCCAACAGCCTGGGGGCTTTCCCCAGCTCAACAGCGTGTGCGCTAGCCCGCTGATGCTGCTGCC  
 GCCGCCGAGCTGTCTCTTTCTGCACCCGCACGGCCAGCAGGTGCCCTACTACCTGGAGAACGAGCCC  
 AGCGCCTACGCCGTGCGGACACCGCCCTCCCGCCTTACAGGTCTAATTCTGACAATCGACGCCAGA  
 ATGGCCGAGAGAGACTGTCCAGCAGTAACGAGAAAGAAACATGATCATGGAGTCTGCCAAGGAGACTCG  
 TACTGTGCCGTGTGCAATGACTATGCCCTGGCTACCATTATGGGGTCTGGTCTCGCAAGGCTGCAAG  
 GCTTTCTTAAAGAGAAGCATTCAAGGACACAATGACTACATGTGTCCAGCTACAAACCAATGCACCATTG  
 ACAAGAACCGGAGGAAGAGTTGCCAGGCCGTGTCGGCTGCGCAAGTGTACGAAGTGGGCATGATGAAGG  
 CGGCATACGAAAAGACCGCCGAGGAGGGAGAATGTTGAAGCACAAGCGTCAGAGAGATGACTTGAAGGC  
 CGAAATGAAATGGGTGCTTCAGGAGACATGAGGGCTGCCAACCTTTGGCCAAGCCCTCTTGATTAAGC  
 AACTAAGAAGAATAGCCCTGCCTTGTCTTGCAGCTGACCAGATGGTCAGTGCCTTGTGGATGCTGA  
 ACCGCCATGATCTATTCTGAATATGATCCTTCTAGACCCTTCAGTGAAGCCTCAATGATGGGCTTATTG  
 ACCAACCTAGCAGATAGGGAGCTGGTTCATATGATCAACTGGGCAAAGAGAGTCCAGGCTTTGGGGACT  
 TGAATCTCCATGATCAGGTCCACCTTCTCGAGTGTGCTGGCTGGAGATTCTGATGATTGGTCTCGTCTG  
 GCGCTCCATGGAACACCCGGGGAAGCTCCTGTTTGTCTCCTAACTTGTCTCTGGACAGAGAACATTCTGTC  
 AAGACTTTGAAAAGAAGCTCTGACAAGGACCTACAAGGACTTCAGACAACCTGGGATTCTTTATGTGAGA  
 AAGAAGATGGACTACTTTTAAAAAATGCAACCAGGGTACAAGAAAAACCAACCTGTAGTCTGCACCTCT  
 AACCAAGGCCAAGAGAGCCTGCCATGTGATACTAGTCCCATCCCCAGAGTCCAGAAATGTAGGTGTCAA  
 GATTCCACTCTGCTCGTAGTGAAGTCC**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001302533
- Insert Size:** 1500 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:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_001302533.1](#), [NP\\_001289462.1](#)

**RefSeq Size:** 2730 bp

**RefSeq ORF:** 1500 bp

**Locus ID:** 13982

**Cytogenetics:** 10 2.03 cM

**Gene Summary:** This gene encodes an estrogen receptor, a member of the nuclear hormone family of intracellular receptors. The encoded protein, activated by the sex hormone estrogen, is a transcription factor composed of several domains important for hormone binding, DNA binding, and activation of transcription. Estrogen and its receptors are essential for sexual development and reproductive function, but also play a role in other tissues such as bone. Similar genes in human have been implicated in pathological processes including breast cancer, endometrial cancer, and osteoporosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]  
Transcript Variant: This variant (4) differs in the 5' UTR, contains an alternate exon in the 3' coding region and uses an upstream alternate 3' terminal exon, compared to variant 1. The encoded isoform (2) has a shorter and distinct C-terminus, compared to isoform 1.