

Product datasheet for **MG227304**

Esr1 (NM_007956) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Esr1 (NM_007956) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Esr1
Synonyms:	E; ER; ER-; ER-alpha; ERa; ERalpha; ER[; Es; ESR; Estr; Estra; Nr; Nr3a1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG227304 representing NM_007956
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACCATGACCCTTACACCAAAGCCTCGGGAATGGCCTTGCTGCACCAGATCCAAGGGAACGAGCTGG
 AGCCCTCAACCGCCCGCAGCTCAAGATGCCATGGAGAGGGCCCTGGGCGAGGTATACGTGGACAACAG
 CAAGCCCACTGTGTTCAACTACCCGAGGGCGCCGCTACGAGTTCAACGCCCGCCGCCGCCGCCGCC
 GCCGCTCGGCGCCGGTCTACGGCCAGTCGGGCATCGCCTACGGCCCCGGGTGGAGGCGGCCGCCCTTCA
 GTGCCAACAGCCTGGGGGCTTCCCCAGCTCAACAGCGTGTGCGCTAGCCCGCTGATGCTGCTGCCACC
 GCCGCCGAGCTGTCTCCTTCTGCACCCGCACGGCCAGCAGGTGCCCTACTACCTGGAGAACGAGCCC
 AGCGCCTACGCCGTGCGGACACCGCCCTCCCGCCTTCTACAGGTCTAATTCTGACAATCGACGCCAGA
 ATGGCCGAGAGAGACTGTCCAGCAGTAACGAGAAAGAAACATGATCATGGAGTCTGCCAAGGAGACTCG
 TACTGTGCCGTGTGCAATGACTATGCCCTGGCTACCATTATGGGGTCTGGTCTCGCAAGGCTGCAAG
 GCTTTCTTTAAGAGAAGCATTCAAGGACACAATGACTACATGTGTCCAGCTACAAACCAATGCACCATTG
 ACAAGAACCGGAGGAAGAGTTGCCAGGCCGTGTCGGCTGCGCAAGTGTACGAAGTGGGCATGATGAAAGG
 CGGCATACGAAAAGACCGCCGAGGAGGGAGAATGTTGAAGCACAAGCGTCAGAGAGATGACTTGGAAAGC
 CGAAATGAAATGGGTGCTTCAGGAGACATGAGGGCTGCCAACCTTGGCCAAGCCCTCTTGATTAAGC
 AACTAAGAAGAATAGCCCTGCCTTGTCTTGCACAGCTGACCAGATGGTCAAGTGCCTTGTGGATGCTGA
 ACCGCCATGATCTATTCTGAATATGATCCTTCTAGACCCTTCAAGTGAAGCCTCAATGATGGGCTTATTG
 ACCAACCTAGCAGATAGGGAGCTGGTTCATATGATCAACTGGGCAAAGAGAGTCCAGGCCTTTGGGGACT
 TGAATCTCATGATCAGGTCCACCTTCTCGAGTGTGCTGGTGGAGATTCTGATGATGGTCTCGCTG
 GCGTCCATGGAACACCGGGGAAGCTCCTGTTTGTCTCTAACTTGTCTCTGGACAGGAATCAAGGTAAA
 TGTGTGGAAGGCATGGTGGAGATCTTGTGACATGTTGCTGGCTACGTCAAGTCCGGTCCGCATGATGAACC
 TGCAGGGAGAAGAGTTTGTGTCCTCAAATCCATCATTTTGTCTAATTCCGGAGTGTACACGTTTCTGTC
 CAGCACCTTGAAGTCTCTGGAAGAGAAGGACCACATCCACCGTGTCTGGACAAGATCACAGACACTTTG
 ATCCACCTGATGGCAAAGCTGGCCTGACTCTGCAGCAGCAGCATCGCCGCTAGCTCAGCTCCTTCTCA
 TTCTTTCCATATCCGGCACATGAGTAACAAAGGCATGGAGCATCTCTACAACATGAAATGCAAGAACGT
 TGTGCCCTCTATGACCTGCTCCTGGAGATGTTGGATGCCACCAGCTTCTGCCCCAGCCAGTCGCATG
 GGAGTCCCCCAGAGGAGCCAGCCAGCCAGCTGGCCACCACCAGCTCCACTTACGACACATTCCTTAC
 AAACCTACTACATACCCCGGAAGCAGAGGGCTTCCCAACACGATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227304 representing NM_007956
 Red=Cloning site Green=Tags(s)

MTMLHTKASGMALLHQIQGNELEPLNRPQLKMPMERALGEVYVDNSKPTVFNYPEGAAAYEFNAAAAAAA
 AASAPVYQSGIAYGPGSEAAAFSANSLGAFPQLNSVSPSPLMLLHPPPQLSPFLHPHGQQVPYYLENEP
 SAYAVRDTGPPAFYRSNSDNRRQNGRERLSSSNEKGNMIMESAKETRYCAVCNDYASGYHYGVWSCEGCK
 AFFKRSIQGHNDYMPATNQCTIDKNRRKSCQACRLRKCVEVGMKGGIRKDRRGRMLKHKRQRDDLEG
 RNEMGASGMRAANLWPSPLVIKHTKKNSPALSLTADQMVSALLDAEPPMIYSEYDPSRPFSEASMMGLL
 TNLADRELVHMINWAKRVPGFDLNLHDQVHLLCAWLEILMIGLVWRSMEHPGKLLFAPNLLLDRNQGK
 CVEGMVEIFDMLLATSSRFMMNLQGEFVCLKSIILLNSGVYTFLSSTLKSLEEKDHIHRVLDKITDTL
 IHLMAKAGLTLQQHRRLAQLLLILSHIRHMSNKGMEHLYNMKCKNVVPLYDLLLLLEMLDAHRLHAPASRM
 GVPPEEPSQTLATTSSTSAHSLQTYIIPPEAEGFPNTI

TRTRPLE - GFP Tag - V

Chromatograms:

https://cdn.origene.com/chromatograms/ja1180_g03.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_007956

ORF Size: 1797 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

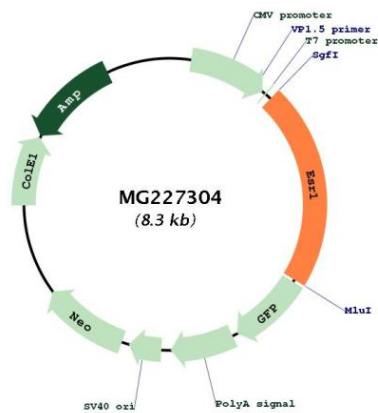
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_007956.5](#)
RefSeq Size: 4319 bp
RefSeq ORF: 1800 bp
Locus ID: 13982
UniProt ID: [P19785](#)
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]

Product images:



Circular map for MG227304