

Product datasheet for **MG227144**

Esr2 (NM_207707) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Esr2 (NM_207707) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Esr2
Synonyms:	ERbeta; ER[b]; Estrb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227144 representing NM_207707
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCATCTGTGCCTCTTCTCACAAAGGATTTTTCTCAGCTGAGACCTACGCAAGACATGGAGATCAAAA
 ACTCACCATCAAGCCTTACTTCCCTGCTTCTATAAAGTGTAGCCAGTCCATCCTACCCCTGGAGCATGG
 TCCCATCTATATCCCTTCTCCTATGTAGAGAGCCGTCACGAATACTCAGCCATGACATTCTACAGTCTT
 GCTGTGATGAACTACAGTGTCCAGCAGCACCAGTAACTGGAAGGTGGGCTGTTCCGCCAGACTGCAA
 GCCAAATGTGCTATGGCCAACTTCTGGACACCTCTCTCTTTAGCCACCCACTGCCAATCATCGCTTCT
 CTATGCAGAACCTCAAAGAGTCTTGGTGTGAAGCAAGATCACTAGAACACACCTTGCCTGTAACAGA
 GAGACCCTGAAGAGGAAGCTTGGCGGGAGCGGTTGTGCCAGCCCTGTTACTAGTCCAAGCGCAAGAGGG
 ATGCTCACTTCTGCGCCGCTGCAGTGATTATGCATCTGGGTATCATTACGGTGTCTGGTCTGTGAAGG
 ATGTAAGGCCTTTTTTAAAAGAAGCATTCAAGGACATAATGACTATATCTGTCCAGCCACGAATCAGTGT
 ACCATAGACAAGAACCGCGTAAAAGCTGCCAGGCCTGCCGACTTCGCAAGTGTACGAAGTAGGAATGG
 TCAAGTGTGGATCCAGGAGAGAAAGGTGTGGGTACCGAATAGTACGAAGACAGAGAAGTGCCAGCGAGCA
 GGTGCATTGCCTGAACAAAGCCAAGAGAACCAGTGGGCACACACCCCGGTGAAGGAGCTACTGTGAAC
 TCTCTGAGTCCCGAGCAGCTGGTCTCACCTGCTGGAAGCTGAGCCACCCAATGTGCTAGTGAGCCGTC
 CCAGCATGCCCTTACCAGAGCCCTCCATGATGATGTCCCTCACGAAGCTGGCTGACAAGGAACTGGTGA
 CATGATTGGCTGGGCCAAGAAAATCCCTGGCTTGTGGAGCTCAGCCTGTTGGACCAAGTCCGCCTTTG
 GAAAGCTGCTGGATGGAGGTCTGATGGTGGGCTGATGTGGCGTCCATCGACCACCCCGCAAGCTCA
 TCTTTGTCCAGACCTCGTTCTGGACAGGTCCTCAGAAGACCCCTACTGGCACGTTGCCAGACGAAGAG
 TGCTGTCCCAAGGGATGAGGGGAAGTGCCTGGAAGGGATTCTGGAATCTTTGACATGCTCCTGGCGACG
 ACGGCACGGTTCCGTGAGTTAAACTGCAGCACAAAGAATATCTGTGTGAAGGCCATGATTCTCTCA
 ACTCCAGTATGTACCCCTGGCTACCGCAAGCCAGGAAGCAGAGAGTAGCCGGAAGCTGACACACCTATT
 GAACGCAGTGACAGATGCCCTGGTCTGGGTGATTCGAAGAGTGGAACTCTTCCAGCAGCAGTCAAGT
 CGTCTGGCCAACCTCCTGATGCTTCTTCTCATGTGAGGCACATCAGTAAACAAGGGCATGGAACATCTGC
 TCAGCATGAAGTGCAAAAATGTGGTCCCGGTGTACGACCTGCTGCTGGAGATGCTGAATGCTCACACGCT
 TCGAGGGTACAAGTCTCAATCTCGGGTCTGAGTGTCTGCTGACAGAGGACAGTAAAGAGCAAGAGGGC
 TCCAGAACCTCCAGTCACAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227144 representing NM_207707
 Red=Cloning site Green=Tags(s)

MSICASSHKDFSQRPTQDMEIKNSPSSLTSPASYNCSQSILPLEHGPIYIPSSYVESRHEYSAMTFYSP
 AVMNYSVPSSTGNLEGGPVRQTASPNVLWPTSGHLSPLATHCQSLLYAEPQKSPWCEARSLEHTLPVNR
 ETLKRKLGSGCASPVTSPSAKRDAHFCAVCSFYAGSYHYGVWSCEGCKAFFKRSIQGHNDYICPATNQC
 TIDKNRRKSCQACRLRKYEVGMVKCGSRRCGYRIVRRQRSASEQVHCLNKAKRTSGHTPRVKELLLN
 SLSPEQLVLTLLAEAPPNVLSRPSMPFTEASMMMSLTKLADKELVHMIGWAKKIPGFVELSLLDQVRL
 ESCWMEVLMVGLMWRSIDHPGKLIAPDLVLDRSSEDPHWHVAQTKSAVPRDEGKVEGILEIFDMLLAT
 TARFRELKQKHEYLKVKAMILLNSSMYPLATASQEAESSRKLTHLLNAVTDALVWVISKSGISSQQQSV
 RLANLLMLLSHVRHISNKGMEHLLSMKCKNVVPVYDLLLLLEMLNAHTLRGKSSISGSECCSTEDSKSKEG
 SQNLQSQ

TRTRPLE - GFP Tag - V

Chromatograms:

https://cdn.origene.com/chromatograms/ja1974_e03.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_207707

ORF Size: 1701 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.

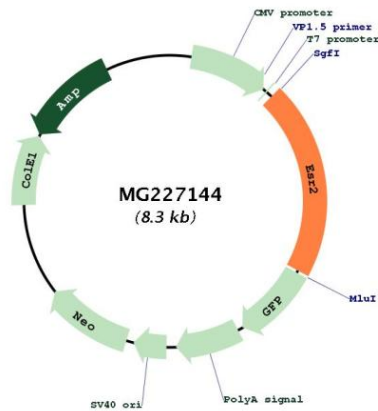
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_207707.1, NP_997590.1](#)
RefSeq Size: 3362 bp
RefSeq ORF: 1704 bp
Locus ID: 13983
UniProt ID: [O08537](#)
Cytogenetics: 12 33.52 cM

Gene Summary: Nuclear hormone receptor. Binds estrogens with an affinity similar to that of ESR1 (ER-alpha), and activates expression of reporter genes containing estrogen response elements (ERE) in an estrogen-dependent manner. May play a role in ovarian follicular growth and maturation. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG227144