

Product datasheet for **MG227140**

Esr2 (NM_010157) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Esr2 (NM_010157) 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:

>MG227140 representing NM_010157
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCCATCTGTGCCTCTTCTCACAAAGGATTTTTCTCAGCTGAGACCTACGCAAGACATGGAGATCAAAA
 ACTCACCATCAAGCCTTACTTCCCTGCTTCTATAAAGTGTAGCCAGTCCATCCTACCCCTGGAGCATGG
 TCCCATCTATATCCCTTCTCCTATGTAGAGAGCCGTCACGAATACTCAGCCATGACATTCTACAGTCTT
 GCTGTGATGAACTACAGTGTCCAGCAGCACCGGTAACCTGGAAGGTGGGCTGTTCCGCCAGACTGCAA
 GCCAAATGTGCTATGGCCAACCTCTGGACACCTCTCTCCTTTAGCCACCCACTGCCAATCATCGCTTCT
 CTATGCAGAACCTCAAAGAGTCTTGGTGTGAAGCAAGATCACTAGAACACACCTTGCCTGTAACAGA
 GAGACCTGAAGAGGAAGCTTGGCGGGAGCGGTTGTGCCAGCCCTGTTACTAGTCCAAGCGCCAAGAGGG
 ATGCTCACTTCTGCGCCGCTGCAGTGATTATGCATCTGGGTATCATTACGGTGTCTGGTCTGTGAAGG
 ATGTAAGGCCTTTTTTAAAAGAAGCATTCAAGGACATAATGACTATATCTGTCCAGCCACGAATCAGTGT
 ACCATAGACAAGAACCGCGTAAAAGCTGCCAGGCCTGCCGACTTCGCAAGTGTACGAAGTAGGAATGG
 TCAAGTGTGGATCCAGGAGAGAAAGGTGTGGGTACCGAATAGTACGAAGACAGAGAAGTGCCAGCGAGCA
 GGTGCATTGCCTGAACAAAGCCAAGAGAACCAGTGGGCACACACCCCGGTGAAGGAGCTACTGTGAAC
 TCTCTGAGTCCCAGCAGCTGGTGTCCACCTGCTGGAAGCTGAGCCACCCAATGTGCTAGTGAGCCGTC
 CCAGCATGCCCTTACCAGGCGCTCCATGATGATGTCCCTCACGAAGCTGGCTGACAAGGAACTGGTGCA
 CATGATTGGCTGGGCCAAGAAAATCCCTGGCTTGTGGAGCTCAGCCTGTTGGACCAAGTCCGCCTTTG
 GAAAGCTGCTGGATGGAGGTCTGATGGTGGGGCTGATGTGGCGCTCCATCGACCACCCCGCAAGCTCA
 TCTTTGCTCCAGACCTCGTTCTGGACAGGGATGAGGGGAAGTGCCTGGAAGGGATTCTGGAAATCTTTGA
 CATGCTCCTGGCGACGACGGCACGGTCCGTGAGTTAAAAGTGCAGCACAAAGAATATCTGTGTGGAAG
 GCCATGATTCTCCTCAACTCCAGTATGTACCCCTTGGCTACCGCAAGCCAGGAAGCAGAGAGTAGCCGGA
 AGCTGACACACCTATTGAACGCAGTGACAGATGCCCTGGTCTGGGTGATTTCAAGAGTGGAAATCTCTTC
 CCAGCAGCAGTCCGTCTGGCCAACCTCCTGATGCTTCTTTCTCATGTCAGGCACATCAGTAACAAG
 GGCATGGAACATCTGCTCAGCATGAAGTCAAAAATGTGGTCCCGGTGTACGACCTGCTGCTGGAGATGC
 TGAATGCTCACACGCTTCGAGGGTACAAGTCTCAATCTCGGGGTCTGAGTGTCTCGACAGAGGACAG
 TAAGACAAAGAGGGCTCCAGAACCTCCAGTCACAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG227140 representing NM_010157
 Red=Cloning site Green=Tags(s)

MSICASSHKDFSQRPTQDMEIKNSPSSLTSPASYNCSQSILPLEHGPIYIPSSYVESRHEYSAMTFYSP
 AVMNYSVPSSTGNLEGGPVRQTASPNVLWPTSGHLSPLATHCQSSLLYAEQKSPWCEARSLEHTLPVNR
 ETLKRKLGSGCASPVTSPSAKRDAHFCAVCSDYASGYHYGVWSCEGCKAFFKRSIQGHNDYICPATNQ
 TIDKNRRKSCQACRLRKCYEVMVKCGSRRERCYRIVRRQRSASEQVHCLNKAKRTSGHTPRVKELLLN
 SLSPEQLVLTLLAEPPNVLVSRPMPFTEASMMMSLTKLADKELVHMIGWAKKIPGFVELSLLDQVRL
 ESCWMEVLMVGLMWRSIDHPGKLIFAPDLVLDREDEKCEGILEIFDMLLATTARFRELKQHQKEYLCVK
 AMILLNSSMYPLATASQEAESSRKLTHLLNAVTDALVWVISKSGISSQQQSVRLANLLMLLSHVRHISNK
 GMEHLLSMKCKNVVPVYDLLLLLEMLNAHTLRGYKSSISGSECCSTEDSKSKEGSQNLQSQ

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_010157

ORF Size: 1647 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.

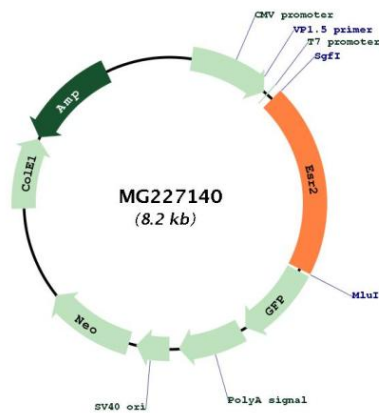
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_010157.3, NP_034287.3](#)
RefSeq Size: 3308 bp
RefSeq ORF: 1650 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 MG227140