

Product datasheet for **RG232810**

Estrogen Receptor beta (ESR2) (NM_001271876) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Receptor beta (ESR2) (NM_001271876) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ESR2
Synonyms:	ER-BETA; Erb; ESR-BETA; ESRB; ESTRB; NR3A2; ODG8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG232810 representing NM_001271876
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATATAAAAACTCACCATCTAGCCTTAATTCCTCTCCTACAACCTGCAGTCAATCCATCTTAC
 CCCTGGAGCACGGCTCCATATACATACCTCCTCTATGTAGACAGCCACCATGAATATCCAGCCATGAC
 ATTCTATAGCCCTGCTGTGATGAATTACAGCATTCCCAGCAATGCACTAACTTGGAAAGTGGGCCTGGT
 CGGCAGACCACAAGCCAAATGTGTTGTGGCCAACACCTGGGCACCTTTCTCCTTTAGTGGTCCATCGCC
 AGTTATCACATCTGTATGCGGAACCTCAAAGAGTCCCTGGTGTGAAGCAAGATCGCTAGAACACACCTT
 ACCTGTAAACAGAGAGACTGAAAAGGAAGGTTAGTGGGAACCGTTGCGCCAGCCCTGTTACTGGTCCA
 GGTTCAAAGAGGGATGCTCACTTCTGCGCTGTCTGCAGCGATTACGCATCGGGATACACTATGGAGTCT
 GGTCTGTGAAGGATGTAAGGCCTTTTTAAAAGAAGCATTCAAGGACATAATGATTATATTTGTCCAGC
 TACAAATCAGTGTACAATCGATAAAAACCGGCGCAAGAGCTGCCAGGCCCTGCCGACTTCGGAAGTGTAC
 GAAGTGGGAATGGTGAAGTGTGGCTCCCGGAGAGAGAGATGTGGGTACCGCCTTGTGCGGAGACAGAGAA
 GTGCCGACGAGCAGCTGCACTGTGCCGGCAAGGCCAAGAGAAGTGGCGGCCACCGCCCCGAGTGGGGGA
 GCTGCTGCTGGACGCCCTGAGCCCCGAGCAGCTAGTGCTCACCCCTCTGGAGGCTGAGCCGCCCATGTG
 CTGATCAGCCGCCCAGTGCGCCCTTACCAGGCCTCCATGATGATGTCCTGACCAAGTTGGCCGACA
 AGGAGTTGGTACACATGATCAGCTGGGCCAAGAAGATCCCGGCTTTGTGGAGCTCAGCCTGTTCCGACCA
 AGTGGCGCTCTTGAGAGCTGTTGGATGGAGGTGTTAATGATGGGGCTGATGTGGCGTCAATTGACCAC
 CCCGGAAGCTCATCTTTGCTCCAGATCTGTTCTGGACAGGGATGAGGGGAAATGCGTAGAAGGAATTC
 TGGAAATCTTTGACATGCTCCTGGCAACTACTCAAGGTTTCGAGAGTTAAAACCCAACAAAAGAATA
 TCTCTGTGTCAAGGCCATGATCCTGCTCAATTCCAGTATGTACCCTCTGGTACACAGCAGCCAGGATGCT
 GACAGCAGCCGGAAGCTGGCTCACTTGCTGAACGCCGTGACCGATGCTTTGGTTGGGTGATTGCCAAGA
 GCGGCATCTCTCCAGCAGCAATCCATGCGCCTGGCTAACCTCCTGATGCTCCTGTCCACGTCAGGCA
 TCGGAGGCTCTGTGTATAACAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG232810 representing NM_001271876
 Red=Cloning site Green=Tags(s)

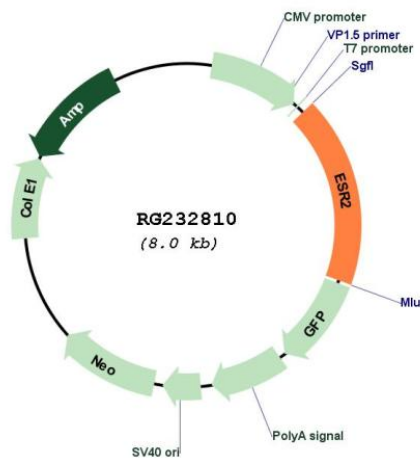
MDIKNSPSSLNSPSSYNCSQSILPLEHGSYIYIPSSYVDSHHEYPAMTFYSPAVMNYIIPSNVTNLEGGPG
 RQTTSPNVLWPTPGHLSPLVVHRQLSHLYAEPQKSPWCEARSLEHTLPVNRETLKRKVSNGRCASPVTGP
 GSKRDAHFCAVCSDYASGYHYGVWSCEGCKAFFKRSIQGHNDYICPATNQCTIDKNRRKSCQACRLRKCY
 EVGMVKCGSRRERCGYRLVRRQRSADQLHCAGKAKRSGGHAPRVRELLLDALSPEQLVLTLLAEPPHV
 LISRPSAPFTEASMMMSLTKLADKELVHMISWAKKIPGFVELSLFDQVRLLESCWMEVLMGLMWRSIDH
 PGKLIFAPDLVLDREDEGKCEGILEIFDMLLATTSRFRELKQLQKEYLVCAMILLNSSMYPLVTATQDA
 DSSRKLALLNAVDALVWVIAKSGISSQQSMRLANLLMLLSHVRHARSCVYK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001271876

ORF Size: 1422 bp

OTI Disclaimer: 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:	<ol style="list-style-type: none">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_001271876.1 , NP_001258805.1
RefSeq Size:	1724 bp
RefSeq ORF:	1425 bp
Locus ID:	2100
UniProt ID:	Q92731
Cytogenetics:	14q23.2-q23.3
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
Gene Summary:	<p>This gene encodes a member of the family of estrogen receptors and superfamily of nuclear receptor transcription factors. The gene product contains an N-terminal DNA binding domain and C-terminal ligand binding domain and is localized to the nucleus, cytoplasm, and mitochondria. Upon binding to 17beta-estradiol or related ligands, the encoded protein forms homo- or hetero-dimers that interact with specific DNA sequences to activate transcription. Some isoforms dominantly inhibit the activity of other estrogen receptor family members. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been fully characterized. [provided by RefSeq, Jul 2008]</p>