

## Product datasheet for **RG232727**

### Estrogen Receptor beta (ESR2) (NM\_001271877) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Receptor beta (ESR2) (NM_001271877) 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)
ORF Nucleotide Sequence:	>RG232727 representing NM_001271877 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATATAAAAACTCACCATCTAGCCTTAATTCTCCTTCTCCTACAACCTGCAGTCAATCCATCTTAC  
CCCTGGAGCACGGCTCCATATACATACCTTCTCCTATGTAGACAGCCACCATGAATATCCAGCCATGAC  
ATTCTATAGCCCTGCTGTGATGAATTACAGCATTCCCAGCAATGCTACTAACTTGAAGGTGGCCCTGGT  
CGGCAGACCACAAGCCAAATGTGTTGTGGCCAAACACCTGGGCACCTTTCTCCTTGTAGTGGTCCATCGCC  
AGTTATACATCTGTATGCGGAACCTCAAAGAGTCCCTGGTGTGAAGCAAGATCGCTAGAACACACCTT  
ACCTGTAACAGAGAGACTGAAAAGGAAGGTTAGTGGGAACCGTTGCGCCAGCCCTGTTACTGGTCCA  
GGTTCAAAGAGGGATGCTCACTTCTGCGCTGTCTGCAGCGATTACGCATCGGGATATCACTATGGAGTCT  
GGTCGTGTGAAGGATGTAAGGCCTTTTTAAAAGAAGCATTCAAGGACATAATGATTATATTTGTCCAGC  
TACAAATCAGTGTACAATCGATAAAAACCGGCGCAAGAGCTGCCAGGCCCTGCCGACTTCGGAAGTGTAC  
GAAGTGGGAATGGTGAAGTGTGGCTCCCGGAGAGAGAGATGTGGGTACCGCTTGTGCGGAGACAGAGAA  
GTGCCGACGAGCAGCTGCACTGTGCCGGCAAGGCAAGAGAAGTGGCGGCCACCGCCCCGAGTGGGGGA  
GCTGCTGTGGACGCCCTGAGCCCCGAGCAGCTAGTGTCAACCTCCTGGAGGCTGAGCCGCCCATGTG  
CTGATCAGCCGCCCCAGTGGCCCTTACCAGGCTCCATGATGATGTCCTGACCAAGTTGGCCGACA  
AGGAGTTGGTACACATGATCAGCTGGGCCAAGAAGATTCCCGGTATGTACCCTCTGGTCACAGCGACCCA  
GGATGCTGACAGCAGCCGAAGCTGGCTCACTTGTGAACGCCGTGACCGATGCTTTGGTTGGGTGATT  
GCCAAGAGCGGCATCTCCTCCCAGCAGCAATCCATGCGCCTGGTAACTCCTGATGCTCCTGTCCACG  
TCAGGCATGCGAGTAACAAGGGCATGGAACATCTGCTCAACATGAAGTGCAAAAATGTGGTCCCAGTGTA  
TGACCTGCTGCTGGAGATGCTGAATGCCACGTGCTTCGCGGGTGCAAGTCTCCATCACGGGTCCGAG  
TGCAGCCCGCAGAGGACAGTAAAAGCAAAGGGCTCCAGAACCCACAGTCTCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG232727 representing NM\_001271877  
Red=Cloning site Green=Tags(s)

MDIKNSPSSLNSPSSYNCSQSILPLEHGSYIYPSSYVDSHHEYPAMTFYSPAVMNYIPSNTNLEGGPG  
 RQTTSPNVLWPTPGHLSPLVVHRQLSHLYAEPQKSPWCEARSLEHTLPVNRETLKRKVSNGRCASPVTGP  
 GSKRDAHFCAVCSYASGYHYGVWVSCGCKAFFKRISIQGHNDYICPATNQCTIDKNRRKSCQACRLKCY  
 EVGMVKCGSRRERCYRLVRRQRSADQLHCAGKAKRSGGHAPRVRELLLDALSPEQLVLTLLAEPPHV  
 LISRPSAPFTEASMMMSLTKLADKELVHMSWAKKIPGMYPLVTATQDADSSRKLHLLNAVTDALVWVI  
 AKSGISSQQQSMRLANLLMLLSHVRHASNKGMEHLLNMKCKNVVPYDLLLLLEMLNAHVLRGCKSSITGSE  
 CSPAESKSKESQNPQSQ

TRTRPLE - GFP Tag - V

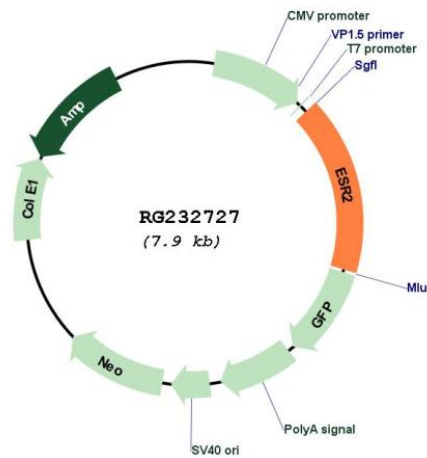
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001271877

<b>ORF Size:</b>	1317 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001271877.1</a> , <a href="#">NP_001258806.1</a>
<b>RefSeq Size:</b>	1518 bp
<b>RefSeq ORF:</b>	1320 bp
<b>Locus ID:</b>	2100
<b>UniProt ID:</b>	<a href="#">Q92731</a>
<b>Cytogenetics:</b>	14q23.2-q23.3
<b>Protein Families:</b>	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
<b>Gene Summary:</b>	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]