

## Product datasheet for **RC209028**

### Estrogen Related Receptor alpha (ESRRA) (NM\_004451) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Related Receptor alpha (ESRRA) (NM_004451) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Estrogen Related Receptor alpha
Synonyms:	ERR1; ERRa; ERRalpha; ESRL1; NR3B1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC209028 representing NM\_004451  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCAGCCAGGTGGTGGCATTGAGCCTCTCTACATCAAGGCAGAGCCGGCCAGCCCTGACAGTCCAA  
 AGGGTTCCCTCGGAGACAGAGACCGAGCCTCCTGTGGCCCTGGCCCTGGTCCAGCTCCACTCGCTGCCT  
 CCCAGGCCACAAGGAAGAGGAGGATGGGAGGGGGCTGGCCTGGCGAGCAGGGCGTGGGAAGCTGGTG  
 CTCAGCTCCCTGCCAAGCGCCTCTGCCTGGTCTGTGGGACGTGGCCTCCGGCTACCACTATGGTGTGG  
 CATCCTGTGAGGCCTGCAAAGCCTTCTTCAAGAGGACCATCCAGGGGAGCATCGAGTACAGCTGTCCGGC  
 CTCCAACGAGTGTGAGATCACCAAGCGGAGACGCAAGGCCTGCCAGGCCTGCCGCTTACCAAGTGCCTG  
 CGGGTGGCATGTCAAGGAGGAGTGCCTGGACCGCTCCGGGTGGCGGCAGAAGTACAAGCGGC  
 GGCCGGAGGTGGACCACTGCCCTTCCCGGCCCTTCCCTGCTGGGCCCTGGCAGTCTGTGGAGGCC  
 CCGGAAGACAGCAGCCCCAGTGAATGCACTGGTGTCTCATCTGCTGGTGGTTGAGCTGAGAAGCTCTAT  
 GCCATGCCTGACCCCGCAGGCCCTGATGGGCACCTCCAGCCGTGGCTACCTCTGTGACCTCTTTGACC  
 GAGAGATTGTGGTACCATCAGCTGGGCCAAGAGCATCCAGGCTTCTCATCGCTGTGCTGCTGACCA  
 GATGTCACTACTGCAGAGCGTGTGGATGGAGGTGCTGGTGTGGGTGGCCAGCGCTCACTGCCACTG  
 CAGGATGAGCTGGCCTTCGCTGAGGACTTAGTCTGGATGAAGAGGGGGCACGGGAGCTGGCCTGGGGG  
 AACTGGGGGCTGCCCTGCTGCAACTAGTGCGGCGCTGCAGGCCCTGCCGCTGGAGCGAGAGGATATGT  
 TCTACTAAAGGCCTTGGCCCTTGCCAATCAGACTCTGTGCACATCGAAGATGCCAGGCTGTGGAGCAG  
 CTGCGAGAAGCTCTGCACGAGCCCTGCTGGAGTATGAAGCCGGCGGGCTGGCCCGGAGGGGGTGTCTG  
 AGCGGCGCGGGGGCAGGCTGCTGCTCAGCTACCGCTCCTCCGCCAGACAGCGGGCAAAGTGTGGC  
 CCATTTCTATGGGTGAAGCTGGAGGCAAGGTGCCATGCACAAGCTGTTCTTGAGATGCTCGAGGCC  
 ATGATGGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC209028 representing NM\_004451  
 Red=Cloning site Green=Tags(s)

MSSQVVGIEPLYIKAEPASPDSPKGSSETETEPVALAPGPAPTRCLPGHKEEEDGEGAGPGEQGGGKLV  
 LSSLPKRLCLVCGDVASGYHYGVASCEACKAFFKRTIQGSI EYSCPASNECEITKRRRKACQACRF TKCL  
 RVGMLKEGVRLDRVRGGRQKYKRRPEVDPLPFPGPFPAGPLAVAGGPRKTAAPVNALVSHLLVVEPEKLY  
 AMPDPAGPDGHLPAVATLCDLFDREIVVTISWAKSIPGFSSLSLSDQMSVLQSVWMEVLVLGVAQRSLPL  
 QDELAFAEDLVLDEEGARAAGL GELGAALLQLVRRQLALRLEREEYVLLKALALANSDSVHIEDAEAVEQ  
 LREALHEALLEYEAGRAGPGGAERRRAGRLLLTPLLRQTAGKVL AHFYGVKLEGKVPMHKLFLEMLEA  
 MMD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8077\\_b04.zip](https://cdn.origene.com/chromatograms/mk8077_b04.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_004451

**ORF Size:** 1269 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:**

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\\_004451.5](#)

**RefSeq Size:** 2284 bp

**RefSeq ORF:** 1272 bp

**Locus ID:** 2101

**UniProt ID:** [P11474](#)

**Cytogenetics:** 11q13.1

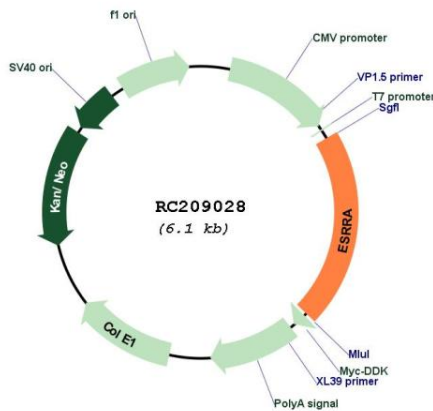
**Domains:** HOLI, zf-C4

**Protein Families:** Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

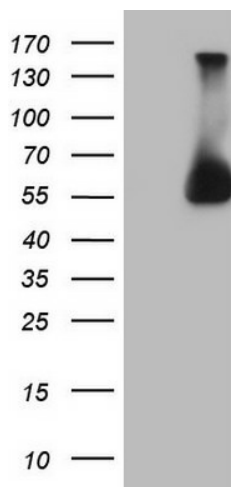
**MW:** 45.5 kDa

**Gene Summary:** The protein encoded by this gene is a nuclear receptor that is most closely related to the estrogen receptor. This protein acts as a site-specific transcription factor and interacts with members of the PGC-1 family of transcription cofactors to regulate the expression of most genes involved in cellular energy production as well as in the process of mitochondrial biogenesis. A processed pseudogene of ESRRA is located on chromosome 13q12.1. [provided by RefSeq, Jun 2019]

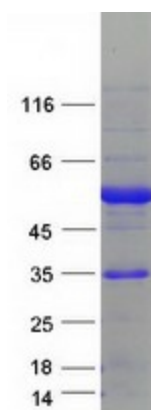
**Product images:**



Circular map for RC209028



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ESRRA (Cat# RC209028, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ESRRA (Cat# [TA808637])(1:2000). Positive lysates [LY417978] (100ug) and [LC417978] (20ug) can be purchased separately from OriGene.



Coomassie blue staining of purified ESRRA protein (Cat# [TP309028]). The protein was produced from HEK293T cells transfected with ESRRA cDNA clone (Cat# RC209028) using MegaTran 2.0 (Cat# [TT210002]).