

Product datasheet for RC226005L4

Estrogen Receptor 1 (ESR1) (NM_001122742) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Estrogen Receptor 1 (ESR1) (NM_001122742) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Estrogen Receptor 1
Synonyms:	ER; Era; ESR; ESRA; ESTRR; NR3A1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC226005).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

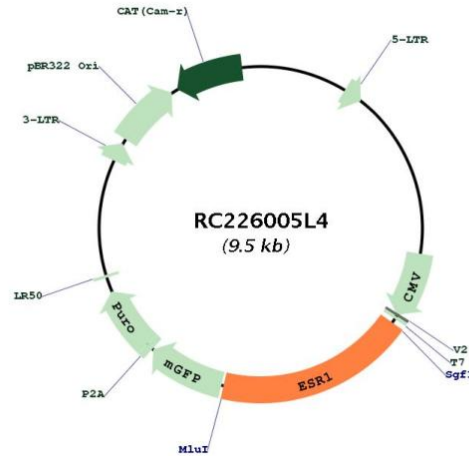
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



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Plasmid Map:


ACCN: NM_001122742

ORF Size: 1785 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_001122742.1](#), [NP_001116214.1](#)

RefSeq Size: 6466 bp

RefSeq ORF: 1788 bp

Locus ID:	2099
UniProt ID:	P03372
Cytogenetics:	6q25.1-q25.2
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
MW:	66.2 kDa
Gene Summary:	<p>This gene encodes an estrogen receptor and ligand-activated transcription factor. The canonical protein contains an N-terminal ligand-independent transactivation domain, a central DNA binding domain, a hinge domain, and a C-terminal ligand-dependent transactivation domain. The protein localizes to the nucleus where it may form either a homodimer or a heterodimer with estrogen receptor 2. The protein encoded by this gene regulates the transcription of many estrogen-inducible genes that play a role in growth, metabolism, sexual development, gestation, and other reproductive functions and is expressed in many non-reproductive tissues. The receptor encoded by this gene plays a key role in breast cancer, endometrial cancer, and osteoporosis. This gene is reported to have dozens of transcript variants due to the use of alternate promoters and alternative splicing, however, the full-length nature of many of these variants remain uncertain. [provided by RefSeq, Jul 2020]</p>