

Product datasheet for RC213277L2

OriGene Technologies, Inc.

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Estrogen Receptor 1 (ESR1) (NM_000125) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Estrogen Receptor 1 (ESR1) (NM_000125) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Estrogen Receptor 1

Synonyms: ER; Era; ESR; ESRA; ESTRR; NR3A1

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

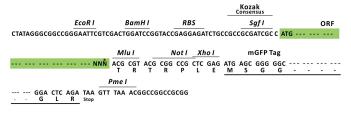
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC213277).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_000125

ORF Size: 1785 bp



Estrogen Receptor 1 (ESR1) (NM_000125) Human Tagged Lenti ORF Clone - RC213277L2

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: <u>NM 000125.2</u>, <u>NP 000116.2</u>

 RefSeq Size:
 6456 bp

 RefSeq ORF:
 1788 bp

 Locus ID:
 2099

 UniProt ID:
 P03372

Cytogenetics: 6q25.1-q25.2

Domains: HOLI, Oest recep, zf-C4

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

MW: 66 kDa

Gene Summary: This gene encodes an estrogen receptor and ligand-activated transcription factor. The

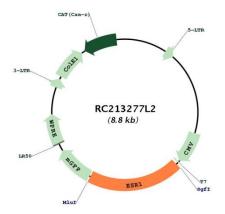
canonical protein contains an N-terminal ligand-independent transactivation domain, a central DNA binding domain, a hinge domain, and a C-terminal ligand-dependent transactivation domain. The protein localizes to the nucleus where it may form either a homodimer or a heterodimer with estrogen receptor 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

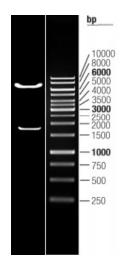
RefSeq, Jul 2020]



Product images:



Circular map for RC213277L2



Double digestion of RC213277L2 using Sgfl and Mlul $\,$