

Product datasheet for RC202697L4

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COX7A2L (NM_004718) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: COX7A2L (NM_004718) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: COX7A2L

Synonyms: COX7AR; COX7RP; EB1; SCAF1; SCAFI; SIG81

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC202697).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_004718

ORF Size: 342 bp





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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 004718.2</u>

RefSeq Size: 1145 bp

RefSeg ORF: 345 bp

Locus ID: 9167

UniProt ID: <u>014548</u>

Cytogenetics: 2p21

Domains: COX7a

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Oxidative

phosphorylation, Parkinson's disease

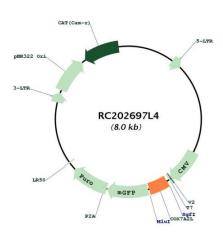
MW: 12.6 kDa



Gene Summary:

Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes a protein similar to polypeptides 1 and 2 of subunit VIIa in the C-terminal region, and also highly similar to the mouse Sig81 protein sequence. This gene is expressed in all tissues, and upregulated in a breast cancer cell line after estrogen treatment. It is possible that this gene represents a regulatory subunit of COX and mediates the higher level of energy production in target cells by estrogen. Several transcript variants, some protein-coding and others non-protein coding, have been found for this gene. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC202697L4