

## Product datasheet for **RC202697L4V**

### COX7A2L (NM\_004718) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	COX7A2L (NM_004718) Human Tagged ORF Clone Lentiviral Particle
Symbol:	COX7A2L
Synonyms:	COX7AR; COX7RP; EB1; SCAF1; SCAFI; SIG81
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_004718
ORF Size:	342 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC202697).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_004718.2</a>
RefSeq Size:	1145 bp
RefSeq ORF:	345 bp
Locus ID:	9167
UniProt ID:	<a href="#">O14548</a>
Cytogenetics:	2p21
Domains:	COX7a
Protein Families:	Druggable Genome, Transmembrane



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**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]