

## Product datasheet for RC206046L3

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## COX5A (NM\_004255) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** COX5A (NM\_004255) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: COX5A

Synonyms: COX; COX-VA; MC4DN20; VA

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC206046).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_004255

ORF Size: 450 bp





## COX5A (NM\_004255) Human Tagged Lenti ORF Clone - RC206046L3

**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 004255.2</u>

RefSeq Size: 784 bp RefSeq ORF: 453 bp

Locus ID: 9377

UniProt ID: P20674

**Cytogenetics:** 15q24.2

**Domains:** COX5A

**Protein Pathways:** Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways,

Oxidative phosphorylation, Parkinson's disease

**MW:** 16.8 kDa

**Gene Summary:** Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It

is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer of proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit Va of the human mitochondrial respiratory chain enzyme. A pseudogene

COX5AP1 has been found in chromosome 14q22. [provided by RefSeq, Jul 2008]