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Product datasheet for RC206539

COX6A2 (NM_005205) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COX6A2 (NM_005205) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	COX6A2
Synonyms:	COX6AH; COXVIAH; MC4DN18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

```
>RC206539 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTTTGCCTCTGAGGCCCCTGACCCGGGGCTTGGCCAGCGCTGCCAAAGGAGGCCACGGAGGAGCAG
GAGCTCGTACCTGGCGTCTGCTGACCTTCGTGCTGGCGCTGCCCAGCGTGGCCCTCTGCACCTTCAACTC
CTATCTCCACTCGGGCCACCGCCCGCGCCCCGAGTTCCGTCCCTACCAACACCTCCGCATCCGCACCAAG
CCCTACCCCTGGGGGGACGGCAACCACACTCTGTTCCACAATAGCCACGTGAACCCTCTGCCCACGGGCT
ACGAACACCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
```

Protein Sequence:

```
>RC206539 protein sequence
Red=Cloning site Green=Tags(s)

MALPLRPLTRGLASAAKGGHGGAGARTWRLLTFVLALPSVALCTFNSYLHSGHRPRPEFRPYQHLRIRTK
PYPWGDGNHTLFHNSHVNPLPTGYEHP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

Chromatograms: https://cdn.origene.com/chromatograms/mk6332_b10.zip

Restriction Sites: SgfI-MluI

View online »

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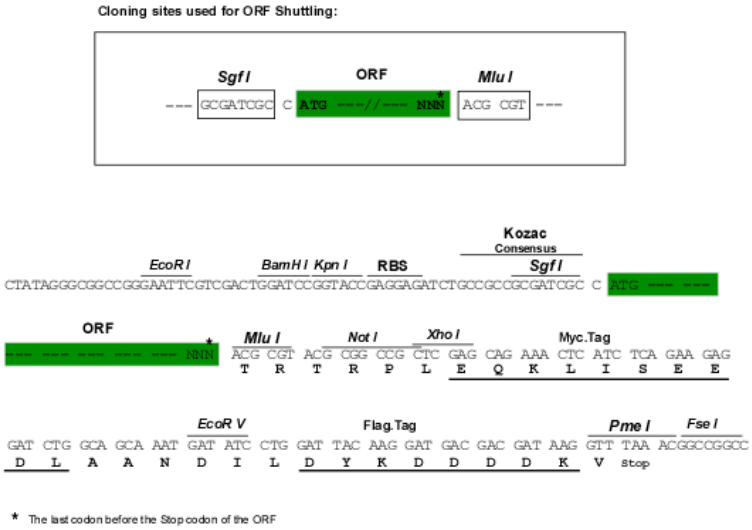
Cloning Scheme:



ACCN:	NM_005205
ORF Size:	291 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005205.4
RefSeq Size:	441 bp
RefSeq ORF:	294 bp

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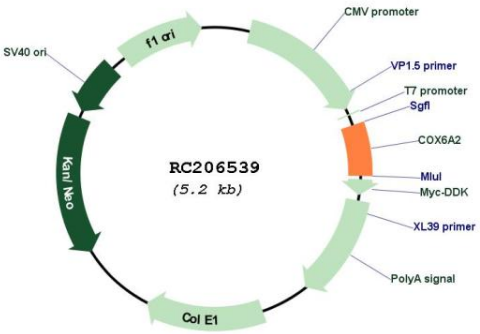
Locus ID:	1339
UniProt ID:	Q02221
Cytogenetics:	16p11.2
Domains:	COX6A
Protein Pathways:	Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	10.8 kDa
Gene Summary:	Cytochrome c oxidase (COX), the terminal enzyme of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. It 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 be involved in the regulation and assembly of the complex. This nuclear gene encodes polypeptide 2 (heart/muscle isoform) of subunit VIa, and polypeptide 2 is present only in striated muscles. Polypeptide 1 (liver isoform) of subunit VIa is encoded by a different gene, and is found in all non-muscle tissues. These two polypeptides share 66% amino acid sequence identity. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC206539

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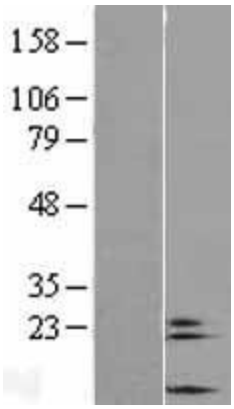
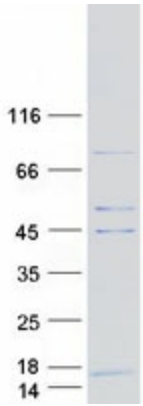


Western blot validation of overexpression lysate (Cat# [LY417442]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206539 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COX6A2 protein (Cat# [TP306539]). The protein was produced from HEK293T cells transfected with COX6A2 cDNA clone (Cat# RC206539) using MegaTran 2.0 (Cat# [TT210002]).

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