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Product datasheet for RC200374

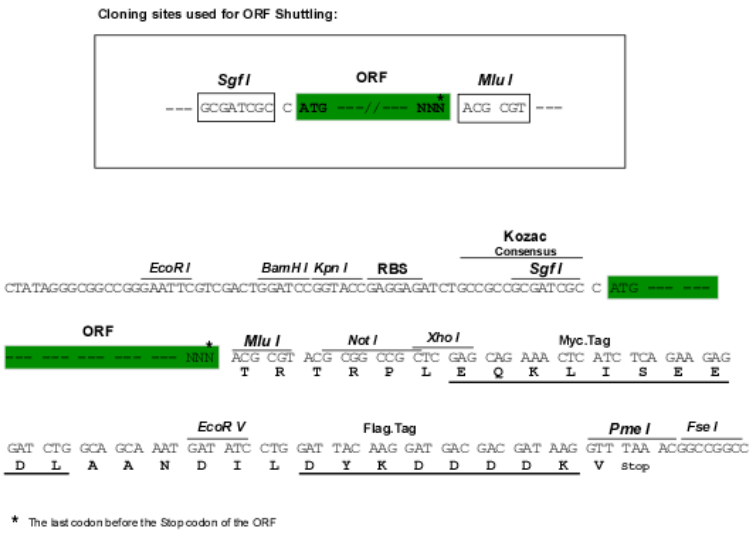
Cytochrome C Oxidase subunit VIc (COX6C) (NM_004374) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome C Oxidase subunit VIc (COX6C) (NM_004374) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytochrome C Oxidase subunit VIc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200374 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCTCCCGAAGTTTTGCCAAAACCTCGGATGCGTGGCCTTCTGGCCAGGCGTCTGCGAAATCATATGG CTGTAGCATTCGTGCTATCCCTGGGGGTTGCAGCTTTGTATAAGTTTCGTGTGGCTGATCAAAGAAAGAA GGCATACGCAGATTTCTACAGAAACTACGATGTCATGAAAGATTTTGAGGAGATGAGGAAGGCTGGTATC TTTCAGAGTGTAAAG ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC200374 protein sequence Red=Cloning site Green=Tags(s) MAPEVLPKPRMRGLLARRLRNHMAVAFVLSLGVAALYKFRVADQRKKAYADFYRNYDVMKDFEEMRKAGI FQSVK TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6388_f07.zip
Restriction Sites:	SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_004374

ORF Size: 225 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).

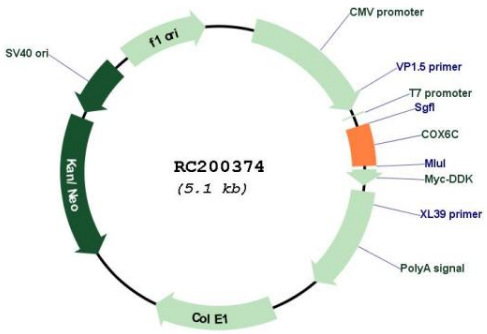
Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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.

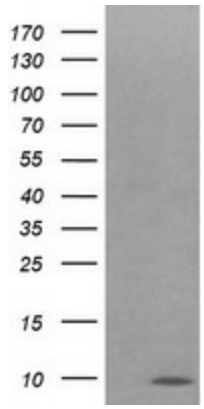
RefSeq: NM_004374.4

RefSeq Size:	921 bp
RefSeq ORF:	228 bp
Locus ID:	1345
UniProt ID:	P09669
Cytogenetics:	8q22.2
Domains:	COX6C
Protein Families:	Transmembrane
Protein Pathways:	Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	8.8 kDa
Gene Summary:	Cytochrome c oxidase, 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 subunit VIc, which has 77% amino acid sequence identity with mouse subunit VIc. This gene is up-regulated in prostate cancer cells. A pseudogene has been found on chromosomes 16p12. [provided by RefSeq, Jul 2010]

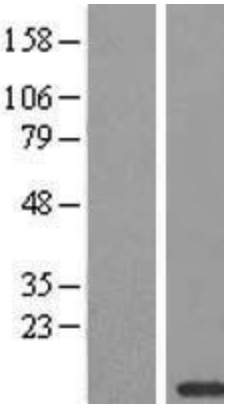
Product images:



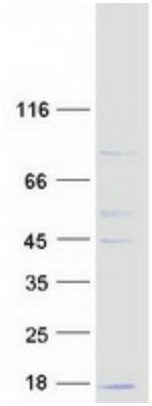
Circular map for RC200374



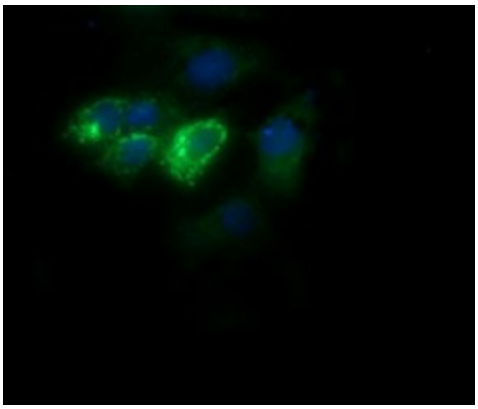
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY COX6C (Cat# RC200374, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-COX6C (Cat# [TA506179]). Positive lysates [LY418028] (100ug) and [LC418028] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418028]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200374 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COX6C protein (Cat# [TP300374]). The protein was produced from HEK293T cells transfected with COX6C cDNA clone (Cat# RC200374) using MegaTran 2.0 (Cat# [TT210002]).



Anti-COX6C mouse monoclonal antibody ([TA506179]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY COX6C (RC200374).