

Product datasheet for RG200374

OriGene Technologies, Inc.

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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: TurboGFP

Symbol: Cytochrome C Oxidase subunit VIc

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG200374 representing NM_004374

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

TTTCAGAGTGTAAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG200374 representing NM_004374

Red=Cloning site Green=Tags(s)

 ${\tt MAPEVLPKPRMRGLLARRLRNHMAVAFVLSLGVAALYKFRVADQRKKAYADFYRNYDVMKDFEEMRKAGI}$

FQSVK

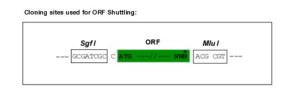
TRTRPLE - GFP Tag - V

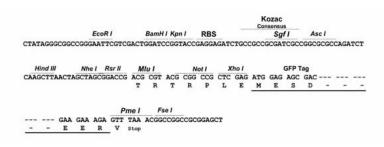
Restriction Sites: Sgfl-Mlul





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.

RefSeq: <u>NM 004374.4</u>



 RefSeq Size:
 444 bp

 RefSeq ORF:
 228 bp

 Locus ID:
 1345

 UniProt ID:
 P09669

 Cytogenetics:
 8q22.2

 Domains:
 COX6C

Protein Families: Transmembrane

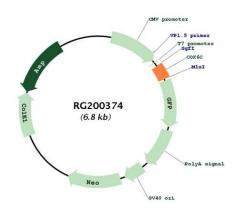
Protein Pathways: Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways,

Oxidative phosphorylation, Parkinson's disease

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 RG200374