

Product datasheet for **RG206539**

COX6A2 (NM_005205) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: COX6A2 (NM_005205) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: COX6A2
Synonyms: COX6AH; COXVIAH; MC4DN18
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG206539 representing NM_005205
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTTGCCTCTGAGGCCCTGACCCGGGCTTGCCAGCGCTGCCAAGGAGGCCACGGAGGAGCAG
GAGCTCGTACCTGGCGTCTGCTGACCTTCGTGCTGGCGCTGCCAGCGTGGCCCTCTGCACCTTCAACTC
CTATCTCCACTCGGGCCACCGCCCGCCCGAGTTCGTCCCTACCAACACCTCCGCATCCGCACCAAG
CCCTACCCCTGGGGGACGGCAACCACACTCTGTTCCACAATAGCCACGTGAACCCTCTGCCACGGCT
ACGAACACCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206539 representing NM_005205
Red=Cloning site Green=Tags(s)
MALPLRPLTRGLASAAKGGHGGAGARTWRLLTFVLALPSVALCTFNSYLHSGHRPRPEFRPYQHLRIRTK
PYPWGDGNHTLFHNSHVNPLPTGYEHP

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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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.

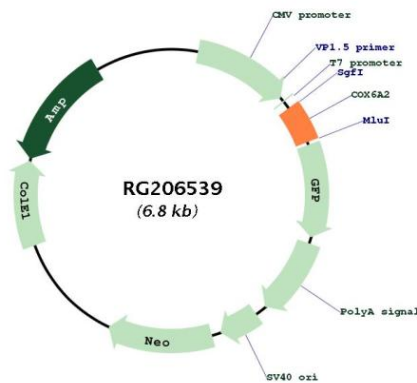
RefSeq: [NM_005205.4](#)

RefSeq Size: 425 bp

RefSeq ORF: 294 bp

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
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 RG206539