

## Product datasheet for **RG201154**

### COX7A1 (NM\_001864) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** COX7A1 (NM\_001864) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** COX7A1  
**Synonyms:** COX7A; COX7AH; COX7AM  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG201154 representing NM\_001864  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGGCCCTTCGGGTGTCCCAGGCGCTGATCCGCTCCTTCAGCTCCACCGCCCGAACCCTTTCAGAACCGAGTGC  
ACCGAGTGC GCGAGAAACAGAAGCTCTTCCAGGAGGACAATGACATCCC GTTGTACCTGAAGGGCGGCAT  
CGTTGACAACATCCTGTACCGAGTGACAATGACGCTGTGTCTGGCGGCACTGTCTACAGCTTGTACTCC  
CTTGGCTGGCCTCCTTCCCAGGAAT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG201154 representing NM\_001864  
Red=Cloning site Green=Tags(s)  
MQALRVSQALIRSFSSSTARNRFQNRVREKQKLFQEDNDIPLYLKGGIVDNILYRVMTLCLGGTVVSYLS  
LGWASFPRN

SGP**TRRRLE** - GFP Tag - V

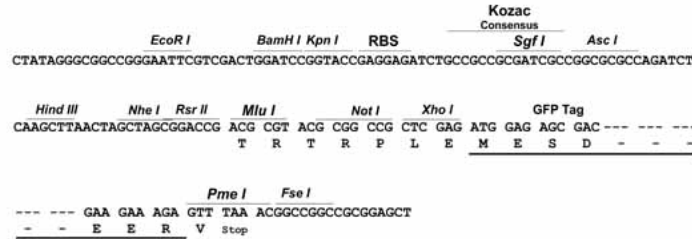
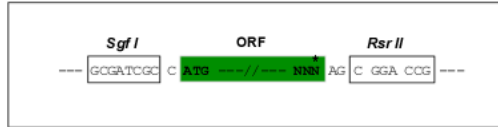
**Restriction Sites:** SgfI-RsrII



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**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_001864

**ORF Size:** 237 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.

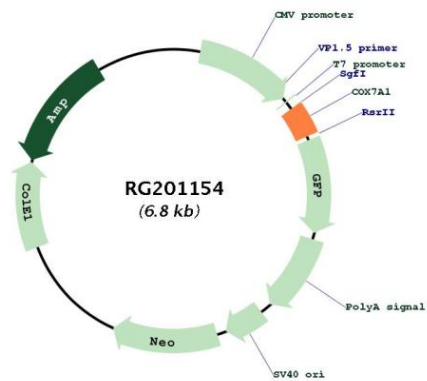
**RefSeq:** [NM\\_001864.4](#)

**RefSeq Size:** 783 bp

**RefSeq ORF:** 240 bp  
**Locus ID:** 1346  
**UniProt ID:** [P24310](#)  
**Cytogenetics:** 19q13.12  
**Protein Families:** Transmembrane  
**Protein Pathways:** Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Oxidative phosphorylation, Parkinson's disease

**Gene Summary:** Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component 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 function in the regulation and assembly of the complex. This nuclear gene encodes polypeptide 1 (muscle isoform) of subunit VIIa and the polypeptide 1 is present only in muscle tissues. Other polypeptides of subunit VIIa are present in both muscle and nonmuscle tissues, and are encoded by different genes. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG201154