

Product datasheet for **RC217381**

FAM36A (COX2) (NM_198076) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: FAM36A (COX2) (NM_198076) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: FAM36A
Synonyms: FAM36A; MC4DN11
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC217381 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCGCCCGCCGGAGCCCGGTGAGCCCGAGGAGAGGAAGTCCCTTAAGCTCCTAGGATTTTTAGATG
TTGAAAATACTCCCTGCGCCCGCATTCAATATTGTATGGTTCATTAGGATCTGTTGTGGCTGGCTTTGG
ACATTTTTTGTCTACTAGTAGAATTAGAAGATCATGTGATGTTGGAGTAGGAGGGTTTATCTTGGTGACT
TTGGGATGCTGGTTTCATTGTAGGTATAATTATGCAAAGCAAAGAATCCAGGAAAGAATTGCCAGAGAAG
AAATTAAGAAGAAGATATTATATGAAGGTACCCACCTCGATCCTGAAAGAAAACACAACGGCAGCAGCAG
CAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217381 protein sequence
Red=Cloning site Green=Tags(s)
MAAPPEPGEPEERKSLKLLGFLDVENTPCARHSILYGLSGSVVAGFGHFLFTSRIRRSADVGVGGFILVT
LGCWFHCRYNAYAKQRIQERIAREEIKKKILYEGTHLDPERKHNGSSSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6453_h02.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_198076

ORF Size: 354 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_198076.6](#)

RefSeq Size: 2632 bp

RefSeq ORF: 357 bp

Locus ID: 116228

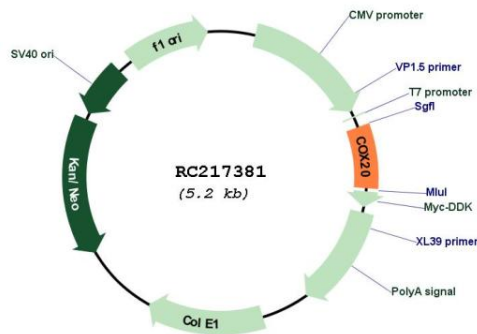
UniProt ID: [Q5RI15](#)

Cytogenetics: 1q44

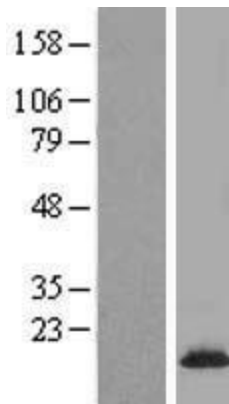
MW: 13.3 kDa

Gene Summary: This gene encodes a protein that plays a role in the assembly of cytochrome C oxidase, an important component of the respiratory pathway. It contains two transmembrane helices and localizes to the mitochondrial membrane. Mutations in this gene can cause mitochondrial complex IV deficiency, which results in ataxia and muscle hypotonia. There are multiple pseudogenes for this gene. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]

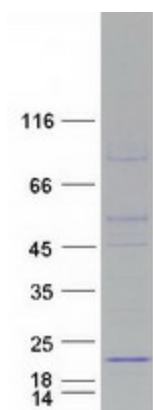
Product images:



Circular map for RC217381



Western blot validation of overexpression lysate (Cat# [LY405090]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217381 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COX20 protein (Cat# [TP317381]). The protein was produced from HEK293T cells transfected with COX20 cDNA clone (Cat# RC217381) using MegaTran 2.0 (Cat# [TT210002]).