

Product datasheet for RC201647

Adrenodoxin (FDX1) (NM_004109) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Adrenodoxin (FDX1) (NM_004109) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Adrenodoxin
Synonyms: ADX; FDX; LOH11CR1D
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC201647 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTGCCGCTGGGGCGCCGGCTGCTGCGCGCCGCTTCTGCTGTCTCGGCGGCCGGCCGGCCGGT
 GGCTGCACCACGCTGGGTCCCGCTGGATCCAGCGCCCTGCTGAGGAACCGGGGCCGGCGGGAGCGC
 GGAGGCGAGCCGGTGCCTGAGCGTGTGGCGCGGGCCCGGAGCAGCTCAGAAGATAAAATAACAGTCCAC
 TTTATAAACCGTGATGGTAAACATTAACAACCAAGGAAAAGTTGGTGATTCTCTGCTAGATGTTGTGG
 TTGAAAATAATCTAGATATTGATGGCTTTGGTGCATGTGAGGGAACCCTGGCTTGTCAACCTGTCACCT
 CATCTTTGAAGATCACATATATGAGAAGTTAGATGCAATCACTGATGAGGAGAATGACATGCTCGATCTG
 GCATATGGACTAACAGACAGATCACGGTTGGGCTGCCAAATCTGTTTGACAAAATCTATGGACAATATGA
 CTGTTTCGAGTGCCTGAAACAGTGGCTGATGCCAGACAATCCATTGATGTGGGCAAGACCTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201647 protein sequence
 Red=Cloning site Green=Tags(s)

MAAAGGARLLRAASAVLGGPAGRWLHHAGSRAGSSGLLRNRPGGSAEASRSLSVSARARSSSEDKITVH
 FINRDGETLTTKGKVGDSLDDVVVNNLDIDGFAGEGTLACSTCHLIFEDHIYEKLDAITDEENDMLDL
 AYGLTDRSRLGCQICLTKSMDNMTVRVPETVADARQSIDVGKTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6032_d01.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004109

ORF Size: 552 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_004109.5](#)

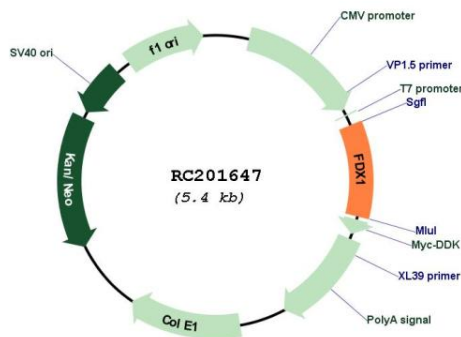
RefSeq Size: 3155 bp

RefSeq ORF: 555 bp

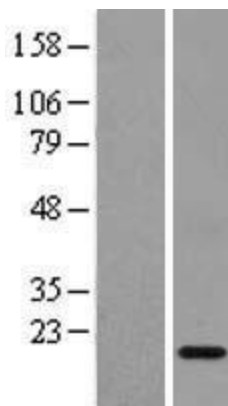
Locus ID: 2230
UniProt ID: [P10109](#)
Cytogenetics: 11q22.3
Domains: fer2
MW: 19.4 kDa

Gene Summary: This gene encodes a small iron-sulfur protein that transfers electrons from NADPH through ferredoxin reductase to mitochondrial cytochrome P450, involved in steroid, vitamin D, and bile acid metabolism. Pseudogenes of this functional gene are found on chromosomes 20 and 21. [provided by RefSeq, Aug 2011]

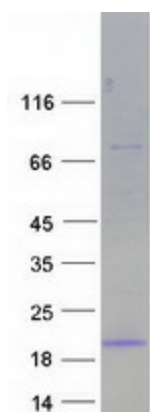
Product images:



Circular map for RC201647



Western blot validation of overexpression lysate (Cat# [LY401330]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201647 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FDX1 protein (Cat# [TP301647]). The protein was produced from HEK293T cells transfected with FDX1 cDNA clone (Cat# RC201647) using MegaTran 2.0 (Cat# [TT210002]).