

Product datasheet for **RC204149**

ETFDH (NM_004453) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ETFDH (NM_004453) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ETFDH
Synonyms:	ETFQO; MADD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC204149 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGTGCCGCTAGCCAAGCTGTCCTGCCTGGCATATCAGTGTTCATGCCTTAAAAATTAAGAAA
 ATTATCTACCTCTATGTGCTATAAGATGGTCTTCAACTTCTACTGTGCCTCGAATTACTACCCATTATAC
 TATTTATCCCCGGGATAAGGACAAGAGATGGGAAGGAGTGAACATGAAAAGGTTTGCAGAAGAAGCAGAT
 GTTGAATAGTTGGTGCAGGCCCTGCAGGGCTCTCTGCAGCTGTTCTGCTAAAACAGTTGGCTGTGGCAC
 ATGAAAAGGACATCCGTGTGTCTAGTGGAGAAAGCTGCCAGATAGGAGCTCATACTCTCAGGGGC
 TTGCCCTTGATCCAGGTGCTTTTAAAGAACTCTCCAGACTGGAAAGAGAAGGGGCTCCACTTAACACT
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 AGAAGCCCTTGGTGTGAAGTATACCCTGGTTATGCAGCTGCTGAGGTCTTTTTCATGATGATGGTGTAGT
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 GACTGGAACTACATGCTAAAGTCACAATTTTTGCAGAAGGTTGCCATGGACATCTAGCCAAGCAACTATA
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 TCAGTTTTGACCTCTTGTATCTGTGGCTCTGAGTGGTACTAATCATGAACATGACCAGCCGGCACACTT
 AACCTTAAGGGATGACAGTATACCTGTAATAGAAATCTGTGATATATGATGGGCCGAGCAGCGATTCC
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 AGGTGGAGGAGGACCTGCTTACAATGGAATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204149 protein sequence
 Red=Cloning site Green=Tags(s)

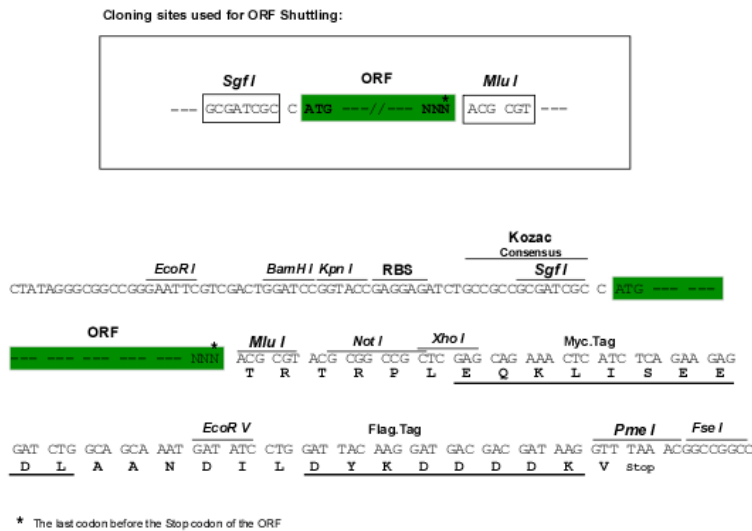
MLVPLAKLSCLAYQCFHALKIKKNYLPLCAIRWSSTSTVPRITTHYTIYPRDKDKRWEVNMERFAEEAD
 VVIVGAGPAGLSAAVRLKQLAVAHEKDIRVCLVEKAAQIGAHTLSGACLDPGAFKELFPDWKEKGAPLNT
 PVTEDRFILTEKYRIPVPIPLGLPMNNHGNVIVRLGHLVSWMGEQAEALGVEVYPGYAAAEVLFHDDGS
 VKGIATNDVGIQKDGAPKATFERGLELHAKVTIFAEGCHGLAKQLYKFFDLRANCEPQTYGIGLKELWV
 IDEKNWKPGRVDHTVGWPLDRHTYGGSFYHLNEGEPLVALGLVVGLDYQNPYLSPFREFQRWKHHPSIR
 PTLEGGKRIAYGARALNEGGFQSIPKLFPGGLLIGCSPGMNVPKIKGHTHTAMKSGILAAESIFNQLTS
 ENLQSKTIGLHVTEYEDNLKNSWYWKELYSVRNIRPSCHGVLGVYGGMIYTGIFYWILRGMPEWTLKHKG
 SDFERLKPAKDCTPIEYKPDGQISFDLLSSVALSGTNHEHDQPAHLTLRDDSIPVNRNLSIYDGPQRF
 CPAGVYEFVPEQDGFRLQINAQNCVHCKTCDIKDPSQINWVPEGGGGPAYNGM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6673_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004453

ORF Size: 1851 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_004453.1](#), [NP_004444.1](#)

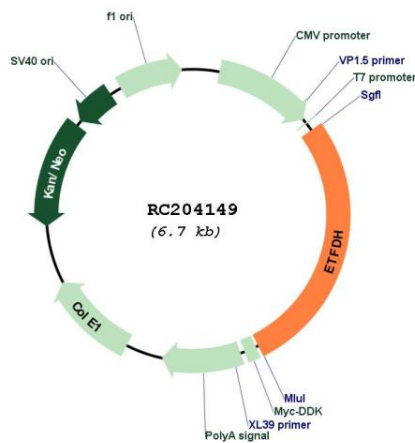
RefSeq Size: 2396 bp

RefSeq ORF: 1854 bp

Locus ID: 2110
UniProt ID: [Q16134](#)
Cytogenetics: 4q32.1
Domains: ETFD
MW: 68.5 kDa

Gene Summary: This gene encodes a component of the electron-transfer system in mitochondria and is essential for electron transfer from a number of mitochondrial flavin-containing dehydrogenases to the main respiratory chain. Mutations in this gene are associated with glutaric acidemia. Alternatively spliced transcript variants that encode distinct isoforms have been observed. [provided by RefSeq, Aug 2013]

Product images:



Circular map for RC204149