

Product datasheet for **RG204149**

ETFDH (NM_004453) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ETFDH (NM_004453) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ETFDH
Synonyms:	ETFQO; MADD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG204149 representing NM_004453
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGGTGCCGCTAGCCAAGCTGTCCTGCCTGGCATATCAGTGTCTTCATGCCTTAAAAATTAAGAAAA
 ATTATCTACCTCTATGTGCTATAAGATGGTCTCAACTTCTACTGTGCCTCGAATTACTACCCATTATAC
 TATTTATCCCCGGGATAAGGACAAGAGATGGGAAGGAGTGAACATGGAAGGTTTGCAGAAGAAGCAGAT
 GTTGAATAGTTGGTGCAGGCCCTGCAGGGCTCTCTGCAGCTGTTCTGCTAAAACAGTTGGCTGTGGCAC
 ATGAAAAGGACATCCGTGTGTCTAGTGGAGAAAGCTGCCAGATAGGAGCTCATACTCTCAGGGGC
 TTGCCTTGATCCAGGTGCTTTTAAAGAACTCTCCAGACTGGAAGAGAAAGGGGCTCCACTTAACACT
 CCTGTAACAGAAGACAGATTTGGAATTTAACAGAGAAAACAGAATTCCTGTGCCAATTTCCAGGGC
 TTCCAATGAATAATCATGGCAATTACATTGTACGCTTGGGACATTTAGTGAGCTGGATGGCGAACAAGC
 AGAAGCCCTTGGTGTGAAGTATACCCTGGTTATGCAGCTGCTGAGGTCCTTTTTCATGATGATGGTGT
 GTAAAAGGAATTGCCACTAACGATGTAGGGATACAAAAGGATGGTGCACCAAAGGCAACATTTGAGAGAG
 GACTGGAACTACATGCTAAAGTCACAATTTTTGCAGAAGGTTGCCATGGACATCTAGCCAAGCAACTATA
 TAAGAAGTTTGTATTTGAGAGCAAATTTGTAACCTCAAACCTACGGGATTGGACTGAAGGATTTATGGGTT
 ATTGATGAAAAGAAGTGGAAACCTGGGAGAGTAGATCACACTGTTGGTTGGCCCTTGACAGACATACCT
 ATGGAGGATCTTCTCTATCATTTGAATGAAGGTGAACCCCTAGTAGCTCTGGTCTTGTGGTTGGTCT
 AGACTATCAGAATCCATACCTGAGTCCATTTAGAGAGTTCAAAGGTGGAACACCATCCTAGCATTCCG
 CCAACCTTGAAGGTGGAAGGATTGCATACGGAGCCAGAGCTCTCAATGAAGGTGGCTTTCACTGTA
 TACCAAAACTCACCTTCTGGTGGTTTACTAATTTGGTGTAGTCTGGTTTTATGAATGTCCCAAGAT
 CAAAGGTACTCACACAGCAATGAAAAGTGGAAATTTAGCAGCAGAATCTATTTTTAATCAACTAAGT
 GAAAATCTCCAATCAAAGACAATAGGACTCCATGTAAGTGAATATGAGGACAATTTGAAGAAGTCAATGGG
 TATGGAAGAGCTATATTCTGTTAGAAATATAAGACCGTCTGCCACGGAGTACTGGGTGTATATGGAGG
 GATGATTTACTGGAATCTTTTACTGGATATTGAGAGGAATGGAGCCGTGGACTCTGAAACATAAAGGT
 TCTGACTTTGAACGGCTCAAGCCAGCCAAGGATTGCACACCTATTGAGTATCCAAAACCCGATGGACAGA
 TCAGTTTTGACCTCTTGTATCTGTGGCTCTGAGTGGTACTAATCATGAACATGACCAGCCGGCACACTT
 AACCTTAAGGGATGACAGTATACCTGTAATAGAAATCTGTGATATATGATGGCCCGAGCAGCGATTC
 TGTCTGCAGGAGTTTATGAATTTGTACCTGTGGAACAAGGTGATGGATTCGGTTACAGATAAATGCTC
 AGAACTGTGTACATTGTAACATGTGATATTAAGATCCAAGTCAGAATATTAAGTGGGTGGTACCTGA
 AGGTGGAGGAGGACCTGCTTACAATGGAATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG204149 representing NM_004453
 Red=Cloning site Green=Tags(s)

MLVPLAKLSCLAYQCFHALKIKKNYLPLCAIRWSSTSTVPRITTHYTIYPRDKDKRWEGVNMERFAEEAD
 VVIVGAGPAGLSAAVRLKQLAVAHEKDIRVCLVEKAAQIGAHTLSGACLDPGAFKELFPDWKEKGAPLNT
 PVTEDRFGILTEKYRIPVPIPLGLPMNNHGNYIVRLGHLVSWMGEQAEALGVEVYPGYAAAEVLFHDDGS
 VKGIATNDVGIQKDGAPKATFERGLELHAKVTIFAEGCHGHLAKQLYKFFDLRANCEPQTYGIGLKELWV
 IDEKNWKPRVDHTVWPLDRHTYGGSFYHLNEGEPLVALGLVVGLDYQNPYLSPFREFQRWKHHPSIR
 PTLEGGKRIAYGARALNEGGFQSIPKLTFFPGLLIGCSPGFMMNVPKIKGTHAMKSGILAAESIFNQLTS
 ENLQSKTIGLHVTEYEDNLKNSWWKELYSVRNIRPSCHGVLGVYGGMIYTGIFYWILRGMPEWTLKHKG
 SDFERLKPAKDCTPIEYKPDGQISFDLLSSVALSGTNHEHDQPAHLTLRDDSIPVNRNLSIYDGPQRF
 CPAGVYEFVPEQDGFRLQINAQNCVHCKTCDIKDPSQINWVPEGGGGPAYNGM

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-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: 2349 bp

RefSeq ORF: 1854 bp

Locus ID: 2110

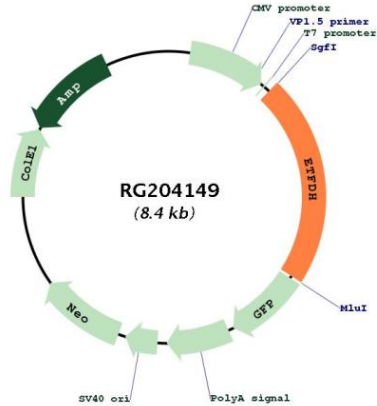
UniProt ID: [Q16134](#)

Cytogenetics: 4q32.1

Domains: ETFD

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 RG204149