

Product datasheet for **RG202147**

ETFA (NM_000126) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ETFA (NM_000126) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ETFA
Synonyms:	EMA; GA2; MADD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202147 representing NM_000126 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTCCGAGCGGCGCTCCGGGCGAGCTCCGGCGGGCGGCTCATTGCTACGATTTAGAGTACCTGG
TAATAGCTGAGCATGCAATGATTCCTAGCACCCATTACTTTAAATACCATTACTGCAGCCACACGCT
TGGAGGTGAAGTGTCTGCTTAGTAGCTGGAACCAATGTGACAAGGTGGCACAAGATCTCTGAAAAGTA
GCAGGCATAGCAAAAGTCTGGTGGCTCAGCATGATGTGTACAAAGGCCTACTTCCAGAGGAACTGACAC
CATTGATTTTGGCAACTCAGAAGCAGTTCAATTACACACACATCTGTGCTGGAGCATCTGCCTTCGGAAA
GAACCTTTTGCCAGAGTAGCAGCCAACTTGAGGTTGCCCGATTTCTGACATCATTGCAATCAAGTCA
CCTGACACATTTGTGAGAACTATTTATGCAGGAAATGCTCTATGTACAGTGAAGTGTGATGAGAAAGTGA
AAGTGTCTTGTCCGTGGAACATCCTTTGATGCTGCAGCAACAAGTGGCGGTAGTGCCAGTTTCAGAAAA
GGCATCAAGTACTTCACCAGTGGAAATATCAGAGTGGCTTGACCAGAAATTAACAAAAAGTATCGACCA
GAGCTAACAGGTGCCAAAGTGGTGGTATCTGGTGGTGGAGGCTTGAAGAGTGGAGAGAATTTAAGTTGT
TATATGACTTGGCAGATCAACTACATGCTGCAGTTGGTGGTCCCGTGTCTGTTGATGCTGGCTTTGT
TCCCAATGACATGCAAGTTGGACAGACGGGAAAAATAGTAGCACCAGAACTTTATATTGCTGTTGGAATA
TCTGGACCATCCAACATTTAGCTGGGATGAAAGACAGCAAGACAATTTGGCAATTAATAAAGACCCAG
AAGCTCCAATTTTCCAAGTGGCAGATTATGGAATAGTTGCAGATTTATTTAAGGTAGTTCTGAAATGAC
TGAGATATTGAAGAAAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG202147 representing NM_000126
 Red=Cloning site Green=Tags(s)

MFRAAAPGQLRRAASLLRFQSTLVIAEHANDSLAPITLNTITAATRLGGEVSCLVAGTKCDKVAQDLCKV
 AGIAKVLVAQHDVYKGLLPEELTPLILATQKQFNETHICAGASAFGKNLLPRVAAKLEVAPISDIIAIKS
 PDTFFVRTIYAGNALCTVKCDEKVKVFSVRGTSFDAAATSGGSASSEKASSTSPVEISEWLDQKLTKSDRP
 ELTGAKVVVSSGGRGLKSGENFKLLYDLADQLHAAV GASRAAVDAGFVPNDMQVVGQTGKIVAPELYIAVGI
 SGAIQHLAGMKDSKTIVAINKDPEAIFQVADYGIVADLFKVVPEMTEILKKK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000126

ORF Size: 999 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_000126.4](#)

RefSeq Size: 1402 bp

RefSeq ORF: 1002 bp

Locus ID: 2108

UniProt ID: [P13804](#)

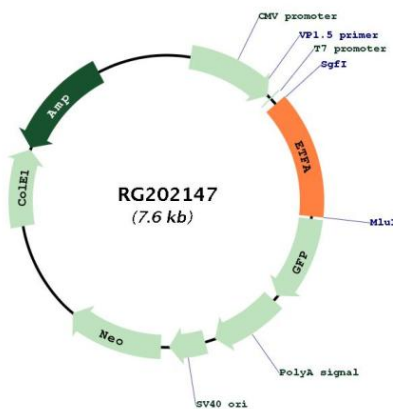
Cytogenetics: 15q24.2-q24.3

Domains: ETF_alpha

Protein Families: Druggable Genome

Gene Summary: ETF A participates in catalyzing the initial step of the mitochondrial fatty acid beta-oxidation. It shuttles electrons between primary flavoprotein dehydrogenases and the membrane-bound electron transfer flavoprotein ubiquinone oxidoreductase. Defects in electron-transfer-flavoprotein have been implicated in type II glutaricaciduria in which multiple acyl-CoA dehydrogenase deficiencies result in large excretion of glutaric, lactic, ethylmalonic, butyric, isobutyric, 2-methyl-butyrac, and isovaleric acids. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG202147