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# ETFA Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11127b

## Product Information

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|---|---|
| **Application** | IHC-P, FC, WB, E |
| **Primary Accession** | P13804 |
| **Other Accession** | P13803, Q99LC5, Q8HXY0, Q2KJE4, NP_000117.1 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Bovine, Monkey, Rat, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB20724 |
| **Calculated MW** | 35080 |
| **Antigen Region** | 276-304 |

## Additional Information

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| **Gene ID** | 2108 |
| **Other Names** | Electron transfer flavoprotein subunit alpha, mitochondrial, Alpha-ETF, ETFA |
| **Target/Specificity** | This ETFA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 276-304 amino acids from the C-terminal region of human ETFA. |
| **Dilution** | IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | ETFA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | ETFA |
| **Function** | Heterodimeric electron transfer flavoprotein that accepts electrons from several mitochondrial dehydrogenases, including acyl-CoA dehydrogenases, |

glutaryl-CoA and sarcosine dehydrogenase (PubMed:10356313, PubMed:15159392, PubMed:15975918, PubMed:27499296, PubMed:9334218). It transfers the electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase) (PubMed:9334218). Required for normal mitochondrial fatty acid oxidation and normal amino acid metabolism (PubMed:12815589, PubMed:1430199, PubMed:1882842).

**Cellular Location** Mitochondrion matrix

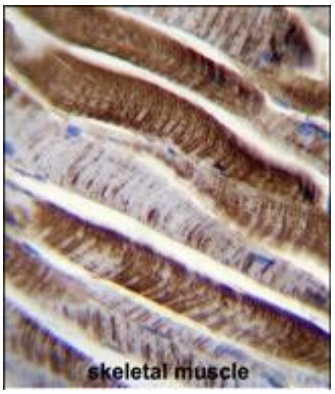
## Background

ETFA 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-butyric, and isovaleric acids. Two transcript variants encoding different isoforms have been found for this gene.

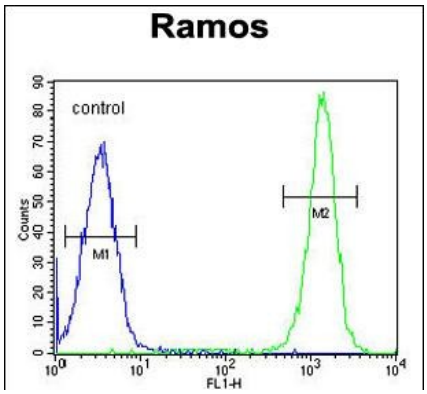
## References

Ohkuma, A., et al. Muscle Nerve 39(3):333-342(2009) Chiong, M.A., et al. Mol. Genet. Metab. 92 (1-2), 109-114 (2007) : Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Schiff, M., et al. Mol. Genet. Metab. 88(2):153-158(2006)

## Images

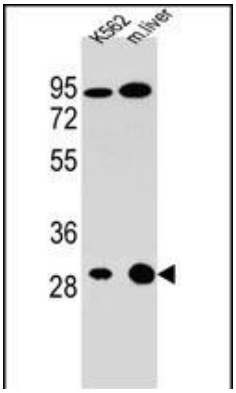



ETFA Antibody (C-term) (Cat. #AP11127b)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ETFA Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.




ETFA Antibody (C-term) (Cat. #AP11127b) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ETFA Antibody (C-term) (Cat. #AP11127b) western blot analysis in K562 cell line and mouse liver tissue lysates (35ug/lane).This demonstrates the ETFA antibody detected the ETFA protein (arrow).

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