

### ETFA Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11127b

### Specification

# ETFA Antibody (C-term) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, FC, WB,E <u>P13804</u> <u>P13803, O99LC5, O8HXY0, O2KJE4,</u> <u>NP\_000117.1</u> Human, Mouse Bovine, Monkey, Rat Rabbit Polyclonal Rabbit IgG 35080 276-304

## ETFA Antibody (C-term) - Additional Information

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~~1:50~100 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.

# ETFA Antibody (C-term) - Protein Information



## Name ETFA

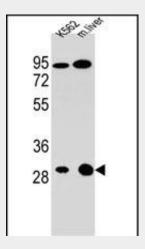
**Function** Heterodimeric electron transfer flavoprotein that accepts electrons from several mitochondrial dehydrogenases, including acyl-CoA dehydrogenases, glutaryl-CoA and sarcosine dehydrogenase (PubMed:<u>10356313</u>, PubMed:<u>15159392</u>, PubMed:<u>15975918</u>, PubMed:<u>27499296</u>, PubMed:<u>9334218</u>). It transfers the electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase) (PubMed:<u>9334218</u>). Required for normal mitochondrial fatty acid oxidation and normal amino acid metabolism (PubMed:<u>12815589</u>, PubMed:<u>1430199</u>, PubMed:<u>1882842</u>).

**Cellular Location** Mitochondrion matrix.

## ETFA Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- ETFA Antibody (C-term) Images

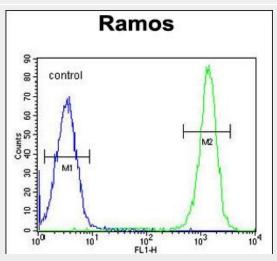


ETFA Antibody (C-term) (Cat. #AP11127b) western blot analysis in K562 cell line and mouse liver tissue lysates (35ug/lane). This demonstrates the ETFA antibody detected the ETFA protein (arrow).





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) - 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.

# ETFA Antibody (C-term) - 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)