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ETFA Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11127b

Product Information

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
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20724
Calculated MW	35080
Antigen Region	276-304

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~~1:100~500 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

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.

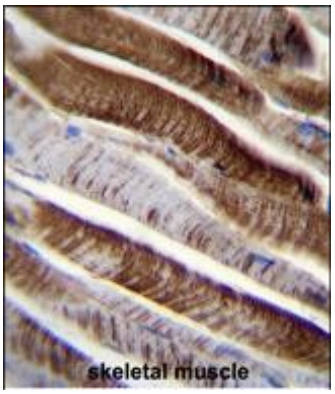
Background

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.

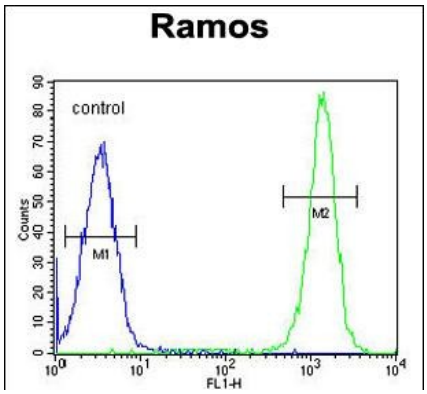
References

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

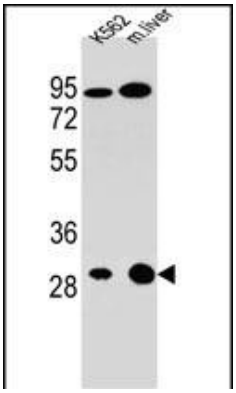


ETFA Antibody (C-term) (Cat. #AP11127b)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ETFA Antibody (C-term) for immunohistochemistry. Clinical 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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