

HADHB Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9859b

Specification

HADHB Antibody (C-term) - Product Information

Application FC, WB,E Primary Accession P55084

Other Accession <u>Q8HXX4</u>, <u>Q46629</u>

Reactivity Human

Predicted Bovine, Monkey

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 51294
Antigen Region 315-342

HADHB Antibody (C-term) - Additional Information

Gene ID 3032

Other Names

Trifunctional enzyme subunit beta, mitochondrial, TP-beta, 3-ketoacyl-CoA thiolase, Acetyl-CoA acyltransferase, Beta-ketothiolase, HADHB

Target/Specificity

This HADHB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 315-342 amino acids from the C-terminal region of human HADHB.

Dilution

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

HADHB Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HADHB Antibody (C-term) - Protein Information

Name HADHB

Function Mitochondrial trifunctional enzyme catalyzes the last three of the four reactions of the mitochondrial beta-oxidation pathway (PubMed:<u>29915090</u>, PubMed:<u>30850536</u>, PubMed:<u>8135828</u>). The mitochondrial beta-oxidation pathway is the major energy-producing process in tissues and is performed through four consecutive reactions breaking down fatty acids into acetyl-CoA (PubMed:<u>29915090</u>). Among the enzymes involved in this pathway, the trifunctional enzyme exhibits specificity for long- chain fatty acids (PubMed:<u>30850536</u>). Mitochondrial trifunctional enzyme is a heterotetrameric complex composed of two proteins, the trifunctional enzyme subunit alpha/HADHA carries the 2,3-enoyl-CoA hydratase and the 3-hydroxyacyl-CoA dehydrogenase activities, while the trifunctional enzyme subunit beta/HADHB described here bears the 3-ketoacyl-CoA thiolase activity (PubMed:<u>29915090</u>, PubMed:<u>30850536</u>, PubMed:<u>8135828</u>).

Cellular Location

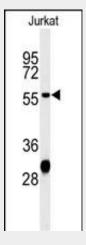
Mitochondrion. Mitochondrion inner membrane Mitochondrion outer membrane. Endoplasmic reticulum. Note=Protein stability and association with membranes require HADHA

HADHB Antibody (C-term) - Protocols

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

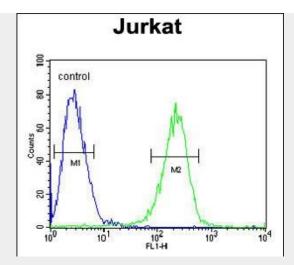
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HADHB Antibody (C-term) - Images



Western blot analysis of HADHB Antibody (C-term) (Cat. #AP9859b) in Jurkat cell line lysates (35ug/lane). HADHB (arrow) was detected using the purified Pab.





HADHB Antibody (C-term) (Cat. #AP9859b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

HADHB Antibody (C-term) - Background

HADHB encodes the beta subunit of the mitochondrial trifunctional protein, which catalyzes the last three steps of mitochondrial beta-oxidation of long chain fatty acids. The mitochondrial membrane-bound heterocomplex is composed of four alpha and four beta subunits, with the beta subunit catalyzing the 3-ketoacyl-CoA thiolase activity. Mutations in this gene result in trifunctional protein deficiency. The encoded protein can also bind RNA and decreases the stability of some mRNAs. The genes of the alpha and beta subunits of the mitochondrial trifunctional protein are located adjacent to each other in the human genome in a head-to-head orientation.

HADHB Antibody (C-term) - References

Purevsuren, J., et al. Mol. Genet. Metab. 98(4):372-377(2009) Bogenhagen, D.F., et al. J. Biol. Chem. 283(6):3665-3675(2008) Wang, R., et al. Zhonghua Fu Chan Ke Za Zhi 41(10):672-675(2006) Hillier, L.W., et al. Nature 434(7034):724-731(2005)