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ACAA1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19909c

Product Information

Application	WB, E
Primary Accession	P09110
Other Accession	NP_001598.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41788
Calculated MW	44292
Antigen Region	147-176

Additional Information

Gene ID	30
Other Names	3-ketoacyl-CoA thiolase, peroxisomal, Acetyl-CoA acyltransferase, Beta-ketothiolase, Peroxisomal 3-oxoacyl-CoA thiolase, ACAA1, ACAA, PTHIO
Target/Specificity	This ACAA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 147-176 amino acids from the Central region of human ACAA1.
Dilution	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	ACAA1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ACAA1 (HGNC:82)
Synonyms	ACAA, PTHIO

Function	Responsible for the thiolytic cleavage of straight chain 3- keto fatty acyl-CoAs (3-oxoacyl-CoAs) (PubMed:11734571, PubMed:2882519). Plays an important role in fatty acid peroxisomal beta-oxidation (PubMed:11734571, PubMed:2882519). Catalyzes the cleavage of medium, long, and very long straight chain 3-oxoacyl-CoAs (PubMed:11734571, PubMed:2882519). May play a role in peroxisomal beta- oxidation step in polyunsaturated fatty acids (PUFAs) biosynthesis. Possibly regulates systemic levels of docosahexaenoic acid (DHA, C22:6n-3) through a process involving endoplasmic reticulum desaturation and elongation of alpha-linolenic acid (ALA, C18:3n-3) to form tetracosahexaenoic acid (THA, C24:6n-3), which is then beta- oxidized to DHA in peroxisomes.
Cellular Location	Peroxisome. Note=Transported into peroxisomes following association with PEX7.

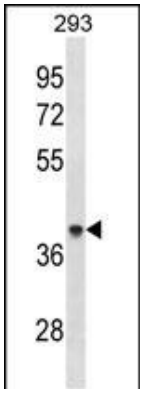
Background

This gene encodes an enzyme operative in the beta-oxidation system of the peroxisomes. Deficiency of this enzyme leads to pseudo-Zellweger syndrome. Alternative splicing results in multiple transcript variants.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
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Rajaraman, P., et al. Cancer Epidemiol. Biomarkers Prev. 19(5):1356-1361(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
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Images



ACAA1 Antibody (Center) (Cat. #AP19909c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the ACAA1 antibody detected the ACAA1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.