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FDFT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14561b

Product Information

Application	WB, E
Primary Accession	P37268
Other Accession	NP_004453.3
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34520
Calculated MW	48115
Antigen Region	332-361

Additional Information

Gene ID	2222
Other Names	Squalene synthase, SQS, SS, FPP:FPP farnesyltransferase, Farnesyl-diphosphate farnesyltransferase, FDFT1
Target/Specificity	This FDFT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 332-361 amino acids from the C-terminal region of human FDFT1.
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	FDFT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FDFT1
Function	Catalyzes the condensation of 2 farnesyl pyrophosphate (FPP) moieties to form squalene. Proceeds in two distinct steps. In the first half-reaction, two molecules of FPP react to form the stable presqualene diphosphate

	intermediate (PSQPP), with concomitant release of a proton and a molecule of inorganic diphosphate. In the second half-reaction, PSQPP undergoes heterolysis, isomerization, and reduction with NADPH or NADH to form squalene. It is the first committed enzyme of the sterol biosynthesis pathway.
Cellular Location	Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q02769}; Multi-pass membrane protein
Tissue Location	Widely expressed..

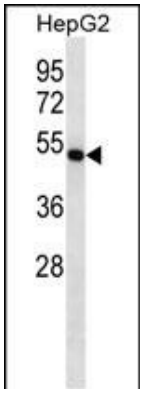
Background

This gene encodes a membrane-associated enzyme located at a branch point in the mevalonate pathway. The encoded protein is the first specific enzyme in cholesterol biosynthesis, catalyzing the dimerization of two molecules of farnesyl diphosphate in a two-step reaction to form squalene.

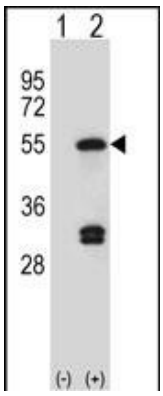
References

Chalasani, N., et al. Gastroenterology 139(5):1567-1576(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Kovanen, L., et al. Alcohol Alcohol. 45(4):303-311(2010)
Lipkin, S.M., et al. Cancer Prev Res (Phila) 3(5):597-603(2010)
Sjoholm, L.K., et al. J Circadian Rhythms 8, 1 (2010) :

Images



FDFT1 Antibody (C-term) (Cat. #AP14561b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the FDFT1 antibody detected the FDFT1 protein (arrow).



Western blot analysis of FDFT1 (arrow) using rabbit polyclonal FDFT1 Antibody (C-term) (Cat. #AP14561b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the FDFT1 gene.