

FDFT1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2417A

Specification

FDFT1 Antibody (N-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>P37268</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 48115 1-30

FDFT1 Antibody (N-term) - 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 1-30 amino acids from the N-terminal region of human FDFT1.

Dilution IHC-P~~1:50~100 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

FDFT1 Antibody (N-term) - 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

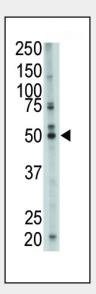
Tissue Location Widely expressed..

FDFT1 Antibody (N-term) - Protocols

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

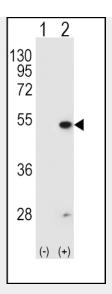
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FDFT1 Antibody (N-term) - Images

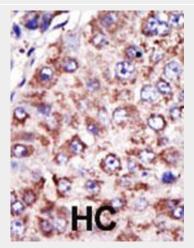


The anti-FDFT1 Pab (Cat. #AP2417a) is used in Western blot to detect FDFT1 in mouse cerebellum tissue lysate.





Western blot analysis of FDFT1 (arrow) using rabbit polyclonal FDFT1 Antibody (E11) (Cat. #AP2417a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the FDFT1 gene.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

FDFT1 Antibody (N-term) - Background

FDFT1 catalyzes the first step in the cholesterol biosynthetic pathway, the conversion of trans-farnesyldiphosphate to squalene. The loss of promoter activity and response to sterols for FDFT1 is localized to a 69-bp section positioned 131 bp 5-prime to the transcription start site. Sequence analysis of this region shows that it contains a sterol regulatory element-1 (SRE1) previously identified in other sterol regulated genes and 2 putative NF1 binding sites.

FDFT1 Antibody (N-term) - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Soltis, D.A., et al., Arch. Biochem. Biophys. 316(2):713-723 (1995). Jiang, G., et al., J. Biol. Chem. 268(17):12818-12824 (1993). Robinson, G.W., et al., Mol. Cell. Biol. 13(5):2706-2717 (1993). Summers, C., et al., Gene 136 (1-2Che), 185-192 (1993). **FDFT1 Antibody (N-term) - Citations**



• <u>Characterization of farnesyl diphosphate farnesyl transferase 1 (FDFT1) expression in cancer.</u>