

**FDFT1 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2417B**

## Specification

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### FDFT1 Antibody (Center) - Product Information

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P37268</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>140-170</b>

### FDFT1 Antibody (Center) - 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 140-170 amino acids from the Central region of human FDFT1.

#### Dilution

WB~~1:1000  
IHC-P~~1:50~100

#### 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### FDFT1 Antibody (Center) - 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

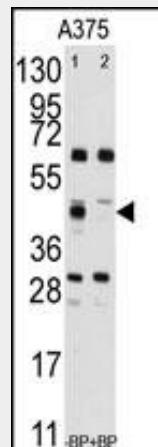
Widely expressed..

### FDFT1 Antibody (Center) - Protocols

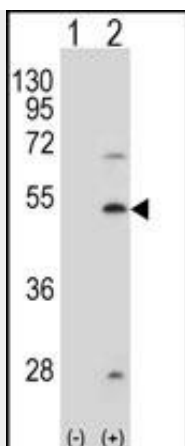
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

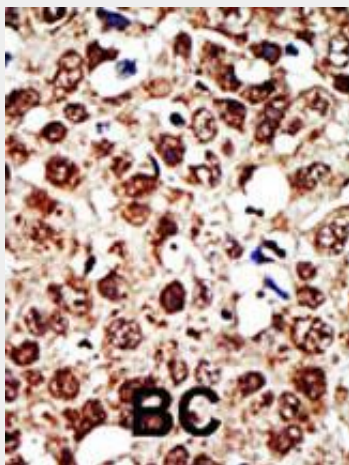
### FDFT1 Antibody (Center) - Images



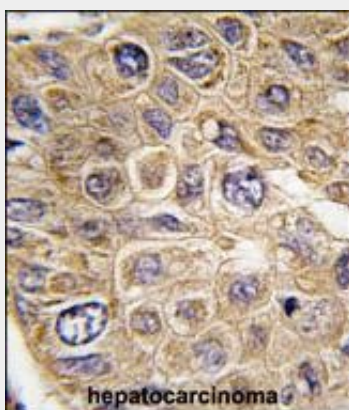
Western blot analysis of anti-FDFT1 Antibody (Center) (Cat.#AP2417b) pre-incubated without(lane 1) and with(lane 2) blocking peptide (BP2417b) in A375 cell line lysate. FDFT1(arrow) was detected using the purified Pab.



Western blot analysis of FDFT1 (arrow) using rabbit polyclonal FDFT1 Antibody (A155) (Cat.#AP2417b). 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.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with FDFT1 Antibody (Center) (Cat.#AP2417b), 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.

**FDFT1 Antibody (Center) - 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 (Center) - 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 (Center) - Citations**

- [5-Aza-2'-deoxycytidine induced growth inhibition of leukemia cells through modulating endogenous cholesterol biosynthesis.](#)
- [Proteomic analysis of doxorubicin-induced changes in the proteome of HepG2 cells combining 2-D DIGE and LC-MS/MS approaches.](#)
- [Docosahexaenoic acid activates some SREBP-2 targets independent of cholesterol and ER stress in SW620 colon cancer cells.](#)