

FDFT1 Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP2417b

Specification

FDFT1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Other Accession P37268 FDFT HUMAN

FDFT1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 2222

Other Names Squalene synthase, SQS, SS, FPP:FPP farnesyltransferase, Farnesyl-diphosphate farnesyltransferase, FDFT1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP2417b was selected from the Center region of human FDFT1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FDFT1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

Blocking Peptides

FDFT1 Antibody (Center) Blocking Peptide - Images

FDFT1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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).