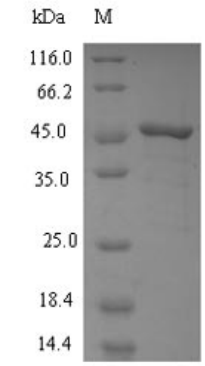
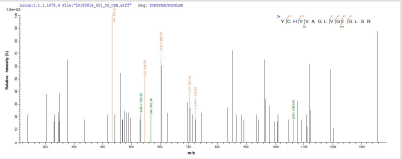
Recombinant Human Squalene synthase (FDFT1), partial

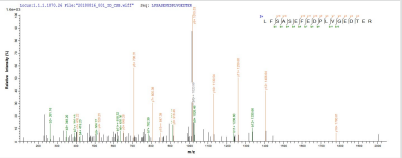
Product Code	CSB-EP008562HU
Relevance	2 farnesyl diphosphate + NAD(P)H = squalene + 2 diphosphate + NAD(P)+.
Abbreviation	Recombinant Human FDFT1 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P37268
Alias	FPP:FPP farnesyltransferase Farnesyl-diphosphate farnesyltransferase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	EFVKCLGHPEEFYNLVRFRIGGKRKVMPKMDQDSLSSSLKTCYKYLNQTSRSF AAVIQALDGEMRNAVCIFYLVLRALDTLEDDMTISVEKKVPLLHNFHSFLYQPD WRFMESKEKDRQVLEDFPTISLEFRNLAEKYQTVIADICRRMGIGMAEFLDKHV TSEQEWDKYCHYVAGLVGIGLSRLFSASEFEDPLVGEDTERANSMGLFLQKT NIIRDYLEDQQGGREFWPQEVWSRYVKKLGDFAKPENIDLAVQCLNELITNAL HHIPDVITYLSRLRNQSVFNFCAIPQVMAIATLAACYNNQQVFKGAVKIRKGQA VTLMMDATNMPAVKAIIYQYMEEIYHRIPDSDPSSSKTRQIISTIRTQNLPNCQLI SRSHYSPIYLSFVMLLAALSWQYLTTLSQVTEDYVQTGEH
Research Area	Metabolism
Source	E.coli
Target Names	FDFT1
Expression Region	2-417aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	52.0kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP008562HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) FDFT1.



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Description

Amino acids 2-417 constitute the expression domain of recombinant Human FDFT1. This FDFT1 protein is theoretically predicted to have a molecular weight of 52 kDa. This FDFT1 protein is produced using e.coli expression system. The FDFT1 gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant FDFT1 protein during the following stages.

Human squalene synthase (FDFT1) is a key enzyme in the cholesterol biosynthesis pathway, catalyzing the condensation of two molecules of farnesyl diphosphate to produce squalene. This reaction is a crucial step in the mevalonate pathway, leading to the synthesis of cholesterol and other isoprenoids. FDFT1 plays a central role in maintaining cellular lipid homeostasis. Dysregulation of cholesterol levels can contribute to various diseases, including cardiovascular disorders. Research on FDFT1 is important for understanding cholesterol metabolism and lipid-related diseases and exploring potential therapeutic targets for conditions associated with abnormal lipid profiles.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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