For Research Use Only

## FDFT1 Recombinant antibody, PBS Only

Catalog Number:83020-1-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** Protein A purification

83020-1-PBS

GeneID (NCBI):

CloneNo.:

Size: 1mg/ml

2222 **UNIPROT ID:** 

BC029641

230362C10

Source: Rabbit

P37268 Full Name:

Isotype: IgG

farnesyl-diphosphate farnesyltransferase 1

Immunogen Catalog Number:

Calculated MW:

417 aa, 48 kDa

Observed MW:

48 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:

human, mouse

## **Background Information**

SQS (Squalene synthase), also known as Farnesyl-diphosphate farnesyltransferase 1 (FDFT1) is a gene that encodes the membrane-associated enzyme squalene synthase, which is the first specific enzyme in cholesterol biosynthesis. FDFT1 is highly expressed in liver, lung, prostate, breast, ovary, bladder, cervix, thyroid, and esophageal cancers, while in colorectal, colon, testicular, uterine, pancreas, and kidney tumors, its expression is downregulated (PMID: 35093030). FDFT1 is a key downstream target of the fasting response and may be involved in CRC cell glucose metabolism (PMID: 32313017).

Storage

Storage:

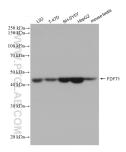
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

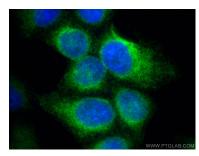
## **Selected Validation Data**



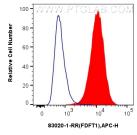
Various lysates were subjected to SDS PAGE followed by western blot with 83020-1-RR (FDFT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83020-1-PBS in a different storage buffer formulation.



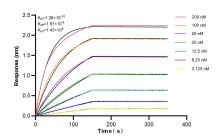
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83020-1-RR (FDFT1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83020-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed LO2 cells using FDFT1 antibody (83020-1-RR, Clone: 230362C10) at dilution of 1:500 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). This data was developed using the same antibody clone with 83020-1-PBS in a different storage buffer formulation.



1x10^6 U2OS cells were intracellularly stained with 0.25 ug Anti-Human FDFT1 (83020-1-RR, Clone:230362C10) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83020-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 83020-1-RR against Human FDFT1 were performed. The affinity constant is 0.126 nM.