

Product Name: KD-Validated Farnesyl Diphosphate Synthase Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA01017

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 48.3kDa

Antigen Information

Gene Name	FDPS FDPS; Farnesyl Diphosphate Synthase; Farnesyl Pyrophosphate Synthetase, Dimethylallyltranstransferase, Geranyltranstransferase; (2E,6E)-Farnesyl Diphosphate
Alternative Names	Synthase; Farnesyl Pyrophosphate Synthase; FPP Synthase; FPS; Dimethylallyltranstransferase; Geranyltranstransferase; FPP Synthetase; EC 2.5.1.10; EC 2.5.1.1; KIAA1293; POROK9; FPPS
Gene ID	2224.0
SwissProt ID	P14324
Immunogen	A synthesized peptide derived from human FDPS

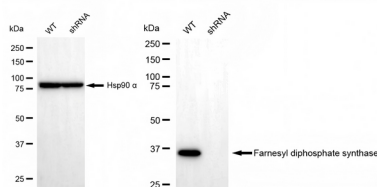
Background

This gene encodes an enzyme that catalyzes the production of geranyl pyrophosphate and farnesyl pyrophosphate from isopentenyl pyrophosphate and dimethylallyl pyrophosphate. The resulting product, farnesyl pyrophosphate, is a key intermediate in cholesterol and sterol biosynthesis, a substrate for protein farnesylation and geranylgeranylation, and a ligand or agonist for certain hormone receptors and growth receptors. Drugs that inhibit this enzyme prevent the post-translational modifications of small GTPases and have been used to treat diseases related to bone resorption. Multiple pseudogenes have been found on chromosomes 1, 7, 14, 15, 21 and X. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Oct 2008]

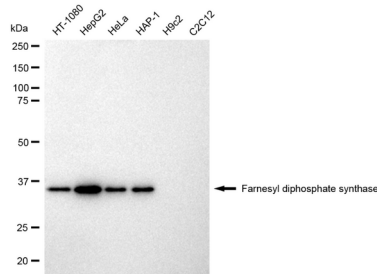
Research Area

Cardiovascular,Signal Transduction,Cancer,Metabolism

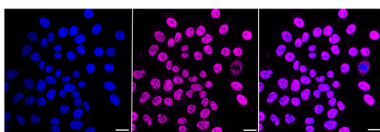
Image Data



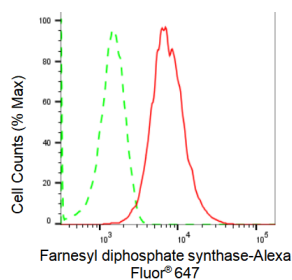
Western blotting analysis using farnesyl diphosphate synthase antibody (KVA01017). Farnesyl diphosphate synthase expression in wild type (WT) and farnesyl diphosphate synthase (FDPS) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with farnesyl diphosphate synthase antibody (KVA01017, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Farnesyl diphosphate synthase antibody (KVA01017). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Farnesyl diphosphate synthase antibody (KVA01017, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Farnesyl diphosphate synthase antibody (KVA01017, 1:1,000). Nuclei were stained blue with DAPI; Farnesyl diphosphate synthase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of Farnesyl diphosphate synthase expression in HepG2 cells using Farnesyl diphosphate synthase antibody (KVA01017, 1:2,000). Green, isotype control; red, Farnesyl diphosphate synthase.