

For Research Use Only

PDSS1 Polyclonal antibody

Catalog Number: 33109-1-AP



Basic Information

Catalog Number: 33109-1-AP	GenBank Accession Number: NM_014317.4	Purification Method: Antigen affinity Purification
Source: Rabbit	GeneID (NCBI): 23590	Recommended Dilutions: WB: 1:1000-1:6000 IF/ICC: 1:200-1:800
Isotype: IgG	UNIPROT ID: Q5T2R2	
Immunogen Catalog Number: AG38975	Full Name: prenyl (decaprenyl) diphosphate synthase, subunit 1	
	Calculated MW: 46kDa, 415aa	
	Observed MW: 34-46 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls: WB : HeLa cells, IF/ICC : A549 cells,
Species Specificity: human	

Background Information

PDSS1 is also known as DPS1 or TPRT. The protein encoded by this gene is an enzyme that elongates the prenyl side-chain of coenzyme Q (also known as ubiquinone), one of the key elements in the respiratory chain. It catalyses the formation of all-trans polyprenyl pyrophosphates from isopentenyl diphosphate during the assembly of polyisoprenoid side chains - the first step in coenzyme Q biosynthesis. PDSS1 forms a functional heterodimer with the PDSS2 subunit, which is responsible for catalysing the chain elongation reaction of isopentenyl diphosphate to generate isoprenoid precursors of varying lengths, such as farnesyl diphosphate and geranylgeranyl diphosphate. These products are fundamental to the synthesis of essential molecules such as cholesterol, ubiquinone, heme A and protein isoprenylation modifications, as well as being vital for other biological processes. Therefore, PDSS1 directly influences key physiological processes in cells by regulating isoprenoid synthesis, including energy metabolism, membrane stability, signal transduction, and antioxidant defence.

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

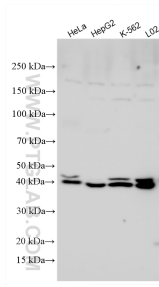
T: 4006900926

E: Proteintech-CN@ptglab.com

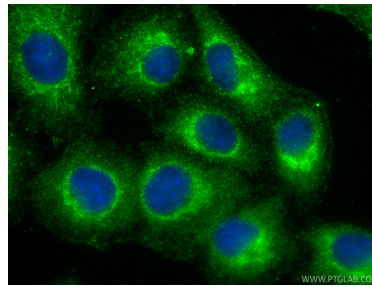
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 33109-1-AP (PDSS1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed A549 cells using PDSS1 antibody (33109-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).