

For Research Use Only

# PDSS1 Polyclonal antibody

Catalog Number:33109-1-AP



## Basic Information

<b>Catalog Number:</b> 33109-1-AP	<b>GenBank Accession Number:</b> NM_014317.4	<b>Purification Method:</b> Antigen affinity Purification
<b>Size:</b> 150ul , Concentration: 500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23590	<b>Recommended Dilutions:</b> WB: 1:1000-1:6000 IF/ICC: 1:200-1:800
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q5T2R2	
<b>Isotype:</b> IgG	<b>Full Name:</b> prenyl (decaprenyl) diphosphate synthase, subunit 1	
<b>Immunogen Catalog Number:</b> AG38975	<b>Calculated MW:</b> 46kDa 415aa	
	<b>Observed MW:</b> 34-46 kDa	

## Applications

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

## 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 isopentyl 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

\*\*\* 20ul sizes contain 0.1% BSA

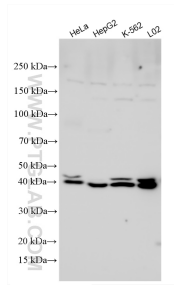
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

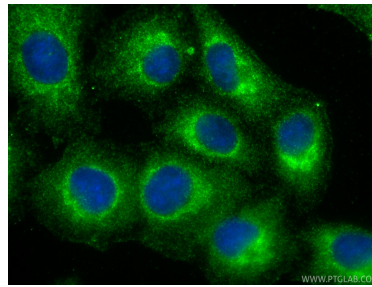
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## Selected Validation Data



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).