

For Research Use Only

# PDSS1 Polyclonal antibody, PBS Only

Catalog Number: 33109-1-PBS



## Basic Information

**Catalog Number:**

33109-1-PBS

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG38975

**GenBank Accession Number:**

NM\_014317.4

**GeneID (NCBI):**

23590

**UNIPROT ID:**

Q5T2R2

**Full Name:**

prenyl (decaprenyl) diphosphate synthase, subunit 1

**Calculated MW:**

46kDa, 415aa

**Observed MW:**

34-46 kDa

**Purification Method:**

Antigen affinity Purification

## Applications

**Tested Applications:**

WB, IF/ICC, Indirect ELISA

**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 -80°C.

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

**Storage Buffer:**

PBS only, pH7.3

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

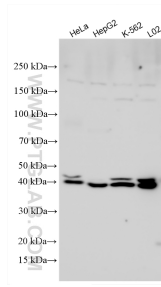
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

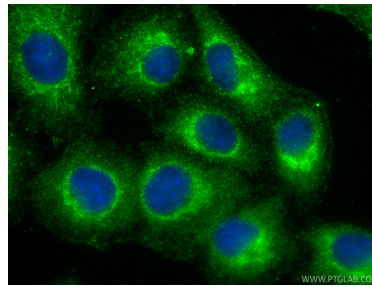
W: [ptgcn.com](http://ptgcn.com)

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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. This data was developed using the same antibody clone with 33109-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 33109-1-PBS in a different storage buffer formulation.