

For Research Use Only

PDSS1 Polyclonal antibody, PBS Only

Catalog Number: 33109-1-PBS



Basic Information

Catalog Number:

33109-1-PBS

Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

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.

Storage Buffer:

PBS only, pH7.3

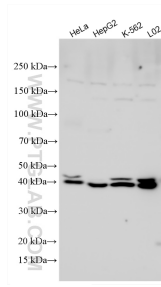
For technical support and original validation data for this product please contact:

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

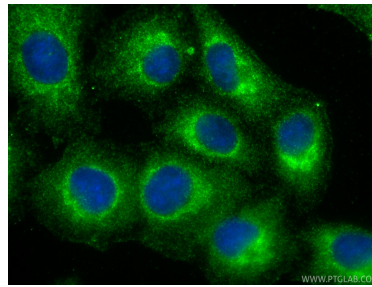
E: proteintech@ptglab.com
W: ptglab.com

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. 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.