



DPS1 Rabbit mAb

Catalog No	YP-rAb-17431
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	PDSS1,DPS1,TPRT
Protein Name	All trans-polyprenyl-diphosphate synthase PDSS1 (All-trans-decaprenyl-diphosphate synthase subunit 1) (EC 2.5.1.91) (Decaprenyl pyrophosphate synthase subunit 1) (Decaprenyl-diphosphate synthase subunit 1) (Solanesyl-diphosphate synthase subunit 1) (Trans-prenyltransferase 1) (TPT 1)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:1000-1:5000;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	DPS1;All trans-polyprenyl-diphosphate synthase PDSS1 (All-trans-decaprenyl-diphosphate synthase subunit 1) (EC 2.5.1.91) (Decaprenyl pyrophosphate synthase subunit 1) (Decaprenyl-diphosphate synthase subunit 1) (Solanesyl-diphosphate synthase subunit 1) (Trans-prenyltransferase 1) (TPT 1);DPS1 TPRT;PDSS1;TPRT
Observed Band	46kD
Calculated Molecular Weight	46kD
Cell Pathway	SUBCELLULAR LOCATION: Mitochondrion {ECO:0000305}.
Tissue Specificity	
Function	Heterotetrameric enzyme that catalyzes the condensation of farnesyl diphosphate (FPP), which acts as a primer, and isopentenyl diphosphate (IPP) to produce prenyl diphosphates of varying chain lengths and participates in the determination of the side chain of ubiquinone (PubMed:16262699). Supplies nona and decaprenyl diphosphate, the precursors for the side chain of the isoprenoid quinones ubiquinone-9 (Q9)and ubiquinone-10 (Q10) respectively (PubMed:16262699). The enzyme adds isopentenyl diphosphate molecules sequentially to farnesyl diphosphate with trans stereochemistry (PubMed:16262699). {ECO:0000269 PubMed:16262699}.



Background

The protein encoded by this gene is an enzyme that elongates the prenyl side-chain of coenzyme Q, or ubiquinone, one of the key elements in the respiratory chain. The gene product catalyzes the formation of all trans-polyprenyl pyrophosphates from isopentyl diphosphate in the assembly of polyisoprenoid side chains, the first step in coenzyme Q biosynthesis. The protein may be peripherally associated with the inner mitochondrial membrane, though no transit peptide has been definitively identified to date. Defects in this gene are a cause of coenzyme Q10 deficiency. [provided by RefSeq, Jul 2008]

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Western blot analysis of lysates from A549 cell, primary antibody was diluted at 1:1000, 4 ° over night, Dylight 800 secondary antibody was diluted at 1:10000, 37 ° 1hour.

