Best Tools for immunology Research

CDIPT rabbit pAb

Catalog No :	YT6808
Reactivity :	Human;Mouse;Rat
Applications :	WB
Target :	CDIPT
Fields :	>>Inositol phosphate metabolism;>>Glycerophospholipid metabolism;>>Metabolic pathways;>>Phosphatidylinositol signaling system
Gene Name :	CDIPT PIS PIS1
Protein Name :	CDIPT
Human Gene Id :	10423
Human Swiss Prot No :	O14735
Mouse Gene Id :	52858
Mouse Swiss Prot No :	Q8VDP6
Rat Gene Id :	192260
Rat Swiss Prot No :	P70500
Immunogen :	Synthesized peptide derived from human CDIPT AA range: 128-178
Specificity :	This antibody detects endogenous levels of CDIPT at Human/Mouse/Rat
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1□500-2000

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 23kD

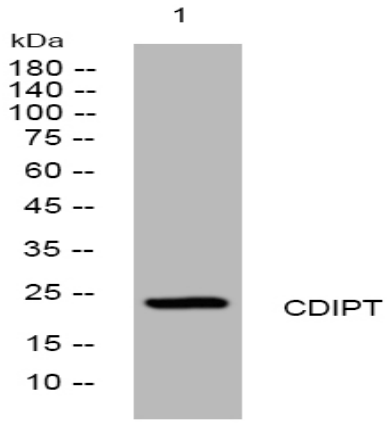
Background : Phosphatidylinositol breakdown products are ubiquitous second messengers that function downstream of many G protein-coupled receptors and tyrosine kinases regulating cell growth, calcium metabolism, and protein kinase C activity. Two enzymes, CDP-diacylglycerol synthase and phosphatidylinositol synthase, are involved in the biosynthesis of phosphatidylinositol. Phosphatidylinositol synthase, a member of the CDP-alcohol phosphatidyl transferase class-I family, is an integral membrane protein found on the cytoplasmic side of the endoplasmic reticulum and the Golgi apparatus. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2013],

Function : catalytic activity:CDP-diacylglycerol + myo-inositol = CMP + phosphatidyl-1D-myo-inositol.,cofactor:Magnesium.,cofactor:Manganese.,function:Catalyzes the biosynthesis of phosphatidylinositol (PtdIns) as well as PtdIns:inositol exchange reaction. May thus act to reduce an excessive cellular PtdIns content. The exchange activity is due to the reverse reaction of PtdIns synthase and is dependent on CMP, which is tightly bound to the enzyme.,induction:Inhibited by PtdIns (product inhibition), phosphatidylinositol phosphate, and nucleoside di- and tri-phosphates.,similarity:Belongs to the CDP-alcohol phosphatidyltransferase class-I family.,tissue specificity:Widely expressed. Higher expression in adult liver and skeletal muscle, slightly lower levels seen in pancreas, kidney, lung, placenta, brain, heart, leukocyte, colon, small intestine, ovary, testis, prostate, thymus and spleen. In fetus,

Subcellular Location : Endoplasmic reticulum membrane ; Multi-pass membrane protein . Cell membrane ; Multi-pass membrane protein .

Expression : Detected in placenta (at protein level). Widely expressed. Higher expression in adult liver and skeletal muscle, slightly lower levels seen in pancreas, kidney, lung, placenta, brain, heart, leukocyte, colon, small intestine, ovary, testis, prostate, thymus and spleen. In fetus, expressed in kidney, liver, lung and brain.

Products Images



Western blot analysis of lysates from THP-1 cells, primary antibody was diluted at 1:1000, 4°over night