10320 Camino Santa Fe, Suite G
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CDIPT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9044c

Specification

CDIPT Antibody (Center) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	O14735
Other Accession	P70500, Q8VDP6
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**23539**
Antigen Region	**99-125**

CDIPT Antibody (Center) - Additional Information

Gene ID 10423

Other Names
CDP-diacylglycerol--inositol 3-phosphatidyltransferase, Phosphatidylinositol synthase, PI synthase, PtdIns synthase, CDIPT, PIS, PIS1

Target/Specificity
This CDIPT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 99-125 amino acids from the Central region of human CDIPT.

Dilution
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CDIPT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CDIPT Antibody (Center) - Protein Information

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Name CDIPT (HGNC:1769)

Synonyms PIS, PIS1

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.

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

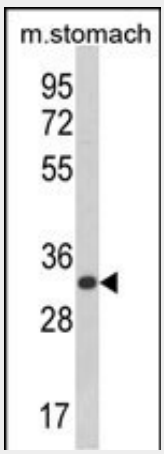
Tissue Location
Detected in placenta (at protein level). Widely expressed. Higher expression in adult liver and skeletal muscle, slightly lower levels seen in pancreas, kidney, lung, placenta, brain, heart, leukocyte, colon, small intestine, ovary, testis, prostate, thymus and spleen. In fetus, expressed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

CDIPT Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CDIPT Antibody (Center) - Images



Western blot analysis of CDIPT Antibody (Center) (Cat. #AP9044c) in mouse stomach tissue lysates (35ug/lane). CDIPT (arrow) was detected using the purified Pab.

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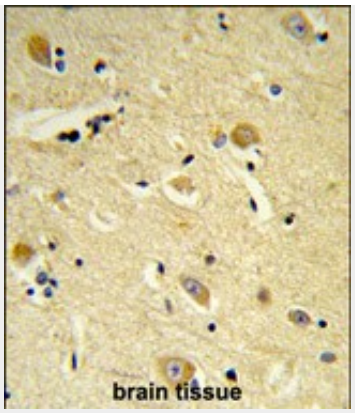
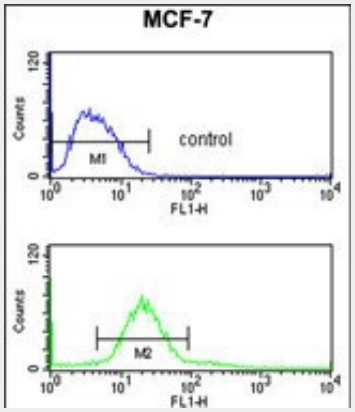


Formalin-fixed and paraffin-embedded human brain tissue reacted with CDIPT Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



CDIPT Antibody (Center) (Cat. #AP9044c) flow cytometry analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CDIPT Antibody (Center) - Background

CDIPT is a protein which is phosphatidylinositol breakdown products that 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.

CDIPT Antibody (Center) - References

de Serres,F.J., et.al., Monaldi Arch Chest Dis 63 (3), 133-141 (2005)
Lykidis,A., et.al., J. Biol. Chem. 272 (52), 33402-33409 (1997)