

**CDIPT Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9044c****Specification**

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**CDIPT Antibody (Center) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">O14735</a>
Other Accession	<a href="#">P70500</a> , <a href="#">Q8VDP6</a>
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**WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50**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**

**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**

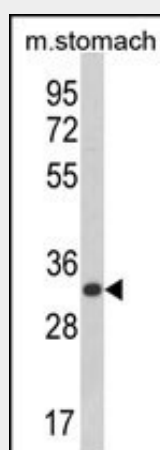
Detected in placenta (at protein level). Widely expressed. Higher expression in adult liver and skeletal muscle, slightly lower levels seen in pancreas, kidney, lung, placenta, brain, heart, leukocyte, colon, small intestine, ovary, testis, prostate, thymus and spleen. In fetus, expressed in kidney,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

**CDIPT Antibody (Center) - Protocols**

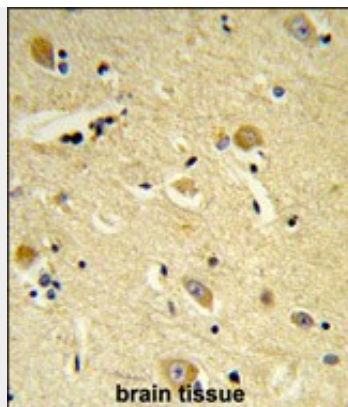
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

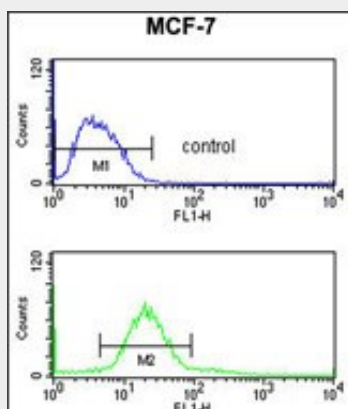
**CDIPT Antibody (Center) - Images**



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



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)