

# PCTAIRE1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57712

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession Q00536

**Reactivity** Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 55716
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human PCTAIRE1

**Epitope Specificity** 61-160/496

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Cytoplasmic vesicle, secretory vesicle. Cell membrane; Peripheral

membrane protein; Cytoplasmic side.Cell junction, synapse, synaptosome

SIMILARITY

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase

family. CDC2/CDKX subfamily. Contains 1 protein kinase domain.

**SUBUNIT** Found in a complex containing CABLES1, CDK17 and TDRD7. Interacts with

YWHAH, YWHAQ and YWHAZ. Interacts with NSF.Identified in a complex with NSF, syntaxin-1, synaptotagmin, SYN1,SYP and CDK5R1 (By similarity). Interacts with BRSK2. Interacts with CCNY; this increases the CDK16 kinase

activity.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** The protein encoded by this gene belongs to the cdc2/cdkx subfamily of the

ser/thr family of protein kinases. It may play a role in signal transduction cascades in terminally differentiated cells; in exocytosis; and in transport of secretory cargo from the endoplasmic reticulum. This gene is thought to escape X inactivation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2009]

## **Additional Information**

**Gene ID** 5127

Other Names Cyclin-dependent kinase 16, 2.7.11.22, Cell division protein kinase 16,

PCTAIRE-motif protein kinase 1, Serine/threonine-protein kinase PCTAIRE-1,

CDK16, PCTAIRE1, PCTK1

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

### **Protein Information**

Name CDK16

Synonyms PCTAIRE1, PCTK1

**Function** Protein kinase that plays a role in vesicle-mediated transport processes and

exocytosis. Regulates GH1 release by brain neurons. Phosphorylates NSF, and thereby regulates NSF oligomerization. Required for normal spermatogenesis. Regulates neuron differentiation and dendrite development (By similarity). Plays a role in the regulation of insulin secretion in response to changes in blood glucose levels. Can phosphorylate CCNY at 'Ser-336' (in vitro).

**Cellular Location** Cytoplasm. Cytoplasmic vesicle, secretory vesicle

{ECO:0000250|UniProtKB:Q63686} Cell membrane; Peripheral membrane

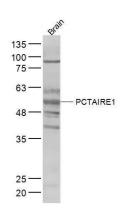
protein; Cytoplasmic side. Synapse, synaptosome

{ECO:0000250|UniProtKB:Q63686}. Note=Colocalizes with insulin in pancreas

islets. Recruited to the cell membrane by CCNY

**Tissue Location** Detected in pancreas islets (at protein level). Detected in brain and pancreas.

## **Images**



Sample:

Brain (Mouse) Lysate at 40 ug

Primary: Anti-PCTAIRE1 (AP57712) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 56 kD Observed band size: 56 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.