

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	Cytoplasm. 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

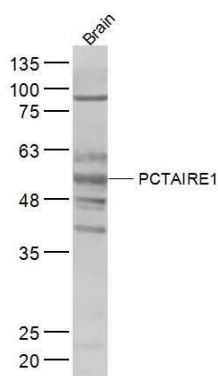
Gene ID	5127
Other Names	Cyclin-dependent kinase 16, 2.7.11.22, Cell division protein kinase 16, PCTAIRE-motif protein kinase 1, Serine/threonine-protein kinase PCTAIRE-1, CDK16, PCTAIRE1, PCTK1
Dilution	WB=1:500-2000, IHC-P=1:100-500, IHC-F=1:100-500, ICC=1:100-500, IF=1:100-500, ELISA=1:5000-10000

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'.