

Ptf1a Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2706A

Specification

Ptf1a Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q7RTS3
Other Accession	Q64305
Reactivity	Human
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	34970
Antigen Region	12-43

Ptf1a Antibody (N-term) - Additional Information

Gene ID 256297

Other Names

Pancreas transcription factor 1 subunit alpha, Class A basic helix-loop-helix protein 29, bHLHa29, Pancreas-specific transcription factor 1a, bHLH transcription factor p48, p48 DNA-binding subunit of transcription factor PTF1, PTF1-p48, PTF1A, BHLHA29, PTF1P48

Target/Specificity

This Ptf1a antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-43 amino acids from the N-terminal region of human Ptf1a.

Dilution

WB~~1:1000

IHC-P~~1:10~50

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

Ptf1a Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Ptf1a Antibody (N-term) - Protein Information

Name PTF1A

Synonyms BHLHA29, PTF1P48

Function Transcription factor implicated in the cell fate determination in various organs. Binds to the E-box consensus sequence 5'-CANNTG-3'. Plays a role in early and late pancreas development and differentiation. Important for determining whether cells allocated to the pancreatic buds continue towards pancreatic organogenesis or revert back to duodenal fates. May be involved in the maintenance of exocrine pancreas-specific gene expression including ELA1 and amylase. Required for the formation of pancreatic acinar and ductal cells. Plays an important role in cerebellar development. Directly regulated by FOXN4 and RORC during retinal development, FOXN4-PTF1A pathway plays a central role in directing the differentiation of retinal progenitors towards horizontal and amacrine fates.

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}. Cytoplasm. Note=In chronic pancreatitis associated with pancreas cancer preferentially accumulates in the cytoplasm of acinar/ductular complexes. In the cytoplasm loses its ability to form the PTF1 complex (By similarity).

Tissue Location

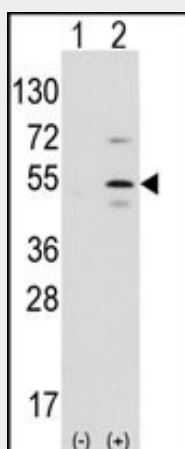
Pancreas-specific (at protein level). Loss of expression is seen in ductal type pancreas cancers

Ptf1a Antibody (N-term) - Protocols

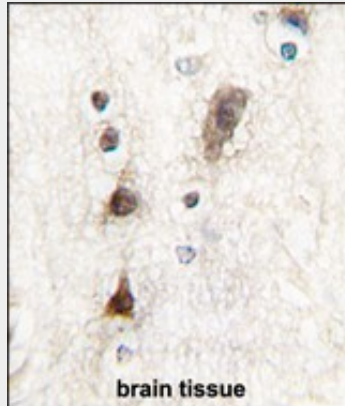
Provided below are standard protocols that you may find useful for product applications.

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

Ptf1a Antibody (N-term) - Images



Western blot analysis of Ptf1a (arrow) using rabbit polyclonal Ptf1a Antibody (N-term) (Cat.#AP2706a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the Ptf1a gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human brain tissue reacted with Ptf1a Antibody (N-term) (Cat.#AP2706a), 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.

Ptf1a Antibody (N-term) - Background

Ptf1a is a component of the pancreas transcription factor 1 complex (PTF1) and is known to have a role in mammalian pancreatic development. The protein plays a role in determining whether cells allocated to the pancreatic buds continue towards pancreatic organogenesis or revert back to duodenal fates. This protein is thought to be involved in the maintenance of exocrine pancreas-specific gene expression including elastase 1 and amylase. Mutations in the Ptf1a gene cause cerebellar agenesis and loss of expression is seen in ductal type pancreas cancers.

Ptf1a Antibody (N-term) - References

- Yamada,M., J. Neurosci. 27 (41), 10924-10934 (2007)
Beres,T.M., Mol. Cell. Biol. 26 (1), 117-130 (2006)
Sellick,G.S., Nat. Genet. 36 (12), 1301-1305 (2004)