10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PFTK1 Antibody (N-term P82)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6780a

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	O94921
Other Accession	O35495
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18842
Calculated MW	53057
Antigen Region	67-96

Additional Information

Gene ID	5218
Other Names	Cyclin-dependent kinase 14, Cell division protein kinase 14, Serine/threonine-protein kinase PFTAIRE-1, hPFTAIRE1, CDK14, KIAA0834, PFTK1
Target/Specificity	This PFTK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-96 amino acids from the N-terminal region of human PFTK1.
Dilution	IHC-P~~1:100 FC~~1:10~50 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	PFTK1 Antibody (N-term P82) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDK14

Synonyms	KIAA0834, PFTK1
Function	Serine/threonine-protein kinase involved in the control of the eukaryotic cell cycle, whose activity is controlled by an associated cyclin. Acts as a cell-cycle regulator of Wnt signaling pathway during G2/M phase by mediating the phosphorylation of LRP6 at 'Ser-1490', leading to the activation of the Wnt signaling pathway. Acts as a regulator of cell cycle progression and cell proliferation via its interaction with CCDN3. Phosphorylates RB1 in vitro, however the relevance of such result remains to be confirmed in vivo. May also play a role in meiosis, neuron differentiation and may indirectly act as a negative regulator of insulin-responsive glucose transport.
Cellular Location	Cell membrane; Peripheral membrane protein. Cytoplasm. Nucleus. Note=Recruited to the cell membrane by CCNY
Tissue Location	Highly expressed in brain, pancreas, kidney, heart, testis and ovary. Also detected at lower levels in other tissues except in spleen and thymus where expression is barely detected

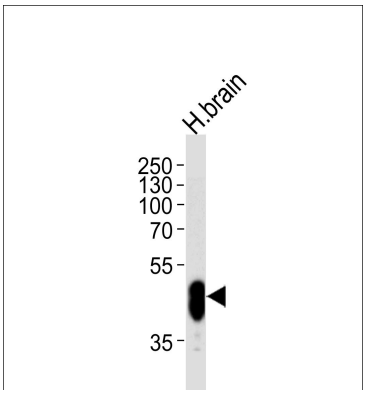
Background

PFTK1 is a member of the CDC2 (MIM 116940)-related protein kinase family. It May play a role in meiosis as well as in neuron differentiation and/or function (By similarity).

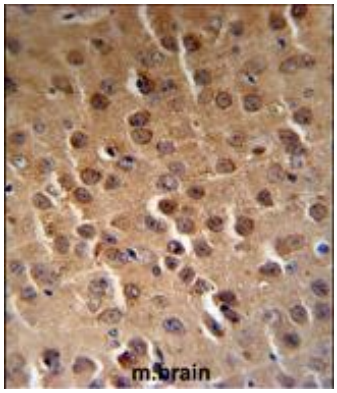
References

Denoeud,F., et.al., Genome Res. 17 (6), 746-759 (2007)

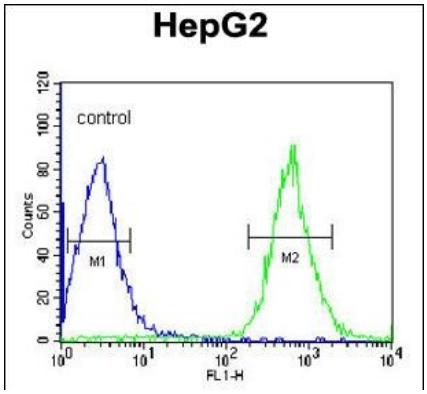
Images



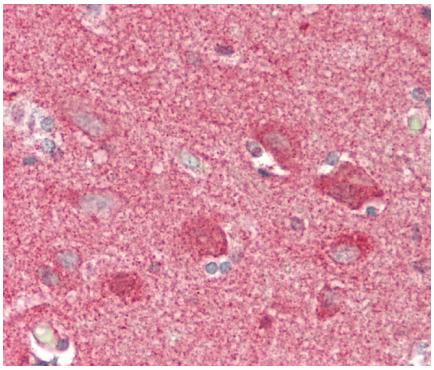
Western blot analysis of lysate from human brain tissue lysate, using PFTK1 Antibody (N-term P82)(Cat. #AP6780a). AP6780a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



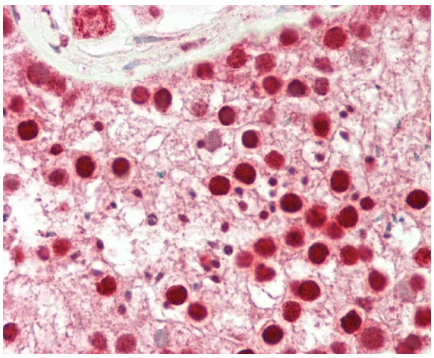
PFTK1 Antibody (N-term P82) (RB18842) IHC analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PFTK1 Antibody (N-term P82) for immunohistochemistry. Clinical relevance has not been evaluated.



PFTK1 Antibody (N-term P82) (Cat. #AP6780a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Formalin-fixed and paraffin-embedded H.brain tissue reacted with PFTK1 Antibody (N-term P82) (Cat#AP6780a).



Formalin-fixed and paraffin-embedded H.testis tissue reacted with PFTK1 Antibody (N-term P82) (Cat#AP6780a).

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