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PFTK1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7550a

Specification

PFTK1 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O94921
Other Accession	B6A7Q3, O35495, NP_036527
Reactivity	**Human, Mouse**
Predicted	**Rabbit**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

PFTK1 Antibody (N-term) - 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 1-30 amino acids from the N-terminal region of human PFTK1.

Dilution
WB~~1:1000
IHC-P~~1:50~100

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
PFTK1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PFTK1 Antibody (N-term) - 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

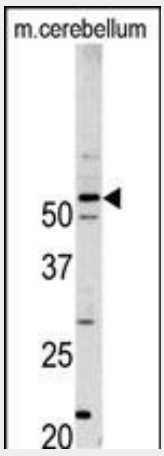
Tissue Location
Highly expressed in brain, pancreas, kidney, heart, testis and ovary. Also detected at lower levels in other tissues except in spleen and thymus where expression is barely detected

PFTK1 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 Cytomety
- Cell Culture

PFTK1 Antibody (N-term) - Images



Western blot analysis of PFTK1 antibody (N-term) (Cat.#AP7550a) in mouse cerebellum tissue lysates (35ug/lane). PFTK1 (arrow) was detected using the purified Pab.

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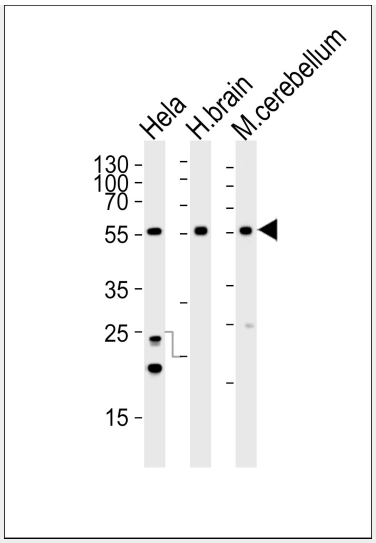
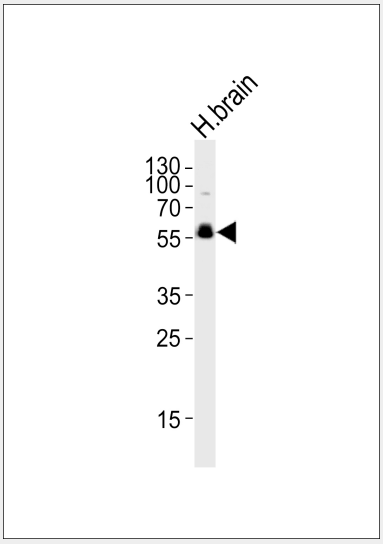
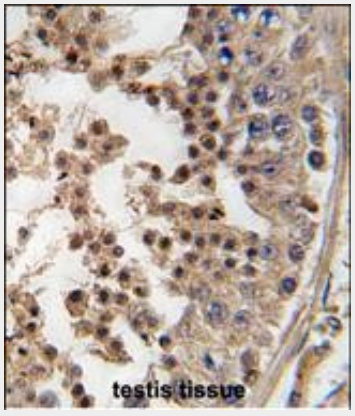


Western blot analysis of lysates from Hela cell line , human brain and mouse cerebellum tissue lysate(from left to right), using PFTK1 Antibody (N-term)(Cat. #AP7550A). AP7550A was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Western blot analysis of lysate from human brain tissue lysate, using PFTK1 Antibody (N-term)(Cat. #AP7550A). AP7550A was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



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Formalin-fixed and paraffin-embedded human testis tissue reacted with PFTK1 antibody (N-term), 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.

PFTK1 Antibody (N-term) - Background

PFTK1, a member of the CDC2/CDKX subfamily of Ser/Thr protein kinases, may play a role in meiosis as well as in neuron differentiation and/or function It is highly expressed in brain, pancreas, kidney, heart, testis and ovary, and also detected at lower levels in other tissues except in spleen and thymus where expression is minimal.

PFTK1 Antibody (N-term) - References

Yang, T., et al., Gene 267(2):165-172 (2001).
Nagase, T., et al., DNA Res. 5(6):355-364 (1998).

PFTK1 Antibody (N-term) - Citations

- Activation/Proliferation-associated Protein 2 (Caprin-2) Positively Regulates CDK14/Cyclin Y-mediated Lipoprotein Receptor-related Protein 5 and 6 (LRP5/6) Constitutive Phosphorylation.