

hPFTK1-M1 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9800b

Specification

hPFTK1-M1 Antibody - Product Information

Application WB,E
Primary Accession 094921

Other Accession <u>B6A7Q3</u>, <u>O35495</u>, <u>NP 036527</u>

Reactivity Human, Mouse

Predicted Rabbit
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 53057
Antigen Region 1-30

hPFTK1-M1 Antibody - 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 hPFTK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from human hPFTK1.

Dilution

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 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

hPFTK1-M1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

hPFTK1-M1 Antibody - 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

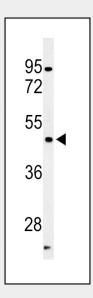
Highly expressed in brain, pancreas, kidney, heart, testis and ovary. Also detected at lower levels in other tissues except in spleen and thymus where expression is barely detected

hPFTK1-M1 Antibody - Protocols

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

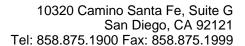
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

hPFTK1-M1 Antibody - Images



Western blot analysis of hPFTK1-M1 (Cat. #AP9800b) in mouse liver tissue lysates (35ug/lane). PFTK1 (arrow) was detected using the purified Pab.

hPFTK1-M1 Antibody - Background





PFTK1 is a member of the CDC2 (MIM 116940)-related protein kinase family.

hPFTK1-M1 Antibody - References

Malumbres, M., et al. Nat. Cell Biol. 11(11):1275-1276(2009) Jiang, M., et al. FEBS Lett. 583(13):2171-2178(2009) de Krom, M., et al. Biol. Psychiatry 65(7):625-630(2009) Denoeud, F., et al. Genome Res. 17(6):746-759(2007) Shu, F., et al. Proc. Natl. Acad. Sci. U.S.A. 104(22):9248-9253(2007)