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hPFTK1-M1 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9800b

Product Information

Application	WB, E
Primary Accession	O94921
Other Accession	B6A7Q3, O35495, NP_036527
Reactivity	Human, Mouse
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25204
Calculated MW	53057
Antigen Region	1-30

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 0.05% (V/V) Proclin 300. 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.

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

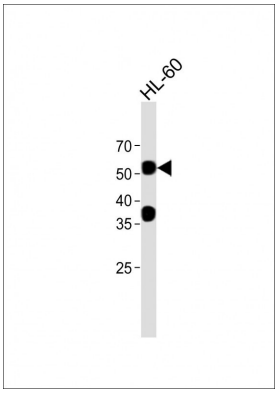
Background

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

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)

Images



All lanes: Anti-hPFTK1-M1 Antibody at 1:1000 dilution + HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 53 KDa Blocking/Dilution buffer: 5% NFDM/TBST.