

Mouse Cdk14 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19420a

Product Information

ApplicationWB, EPrimary AccessionO35495Other AccessionNP_035204.2ReactivityHuman, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB40562Calculated MW52996Antigen Region45-72

Additional Information

Gene ID 18647

Other Names Cyclin-dependent kinase 14, Cell division protein kinase 14,

Serine/threonine-protein kinase PFTAIRE-1, Cdk14, Kiaa0834, Pftk1

Target/SpecificityThis Mouse Cdk14 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 45-72 amino acids from the N-terminal

region of mouse Cdk14.

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 Mouse Cdk14 Antibody(N-term) 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 (By similarity).

Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasm. Nucleus.

Note=Recruited to the cell membrane by CCNY.

Tissue Location

In the adult, widely expressed at low levels except in brain, kidney and testis where expression is high. In the brain, detected in cortex, hippocampus, dentate gyrus, amygdala cortex, parasubiculum and cerebellum. In the embryo, expressed predominantly in the nervous system.

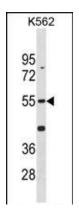
Background

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 (By similarity).

References

Quina, L.A., et al. J. Neurosci. 29(45):14309-14322(2009) Jiang, M., et al. FEBS Lett. 583(13):2171-2178(2009) Jones, B.C., et al. Am. J. Physiol. Regul. Integr. Comp. Physiol. 293 (1), R116-R124 (2007): Visel, A., et al. Nucleic Acids Res. 32 (DATABASE ISSUE), D552-D556 (2004): Okazaki, N., et al. DNA Res. 10(4):167-180(2003)

Images



Mouse Cdk14 Antibody (N-term)(Cat. #AP19420a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the Mouse Cdk14 antibody detected the Mouse Cdk14 protein (arrow).

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