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Anti-CDK5R1 p35 Antibody

Catalog # AP51069

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q15078
Reactivity	Human, Mouse, Rat, Zebrafish, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34060

Additional Information

Gene ID	8851
Other Names	CDK5R; NCK5A; Cyclin-dependent kinase 5 activator 1; CDK5 activator 1; Cyclin-dependent kinase 5 regulatory subunit 1; TPKII regulatory subunit
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CDK5R1 p35. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

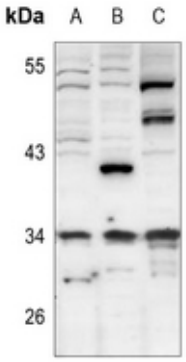
Name	CDK5R1
Synonyms	CDK5R, NCK5A
Function	p35 is a neuron specific activator of CDK5. The complex p35/CDK5 is required for neurite outgrowth and cortical lamination. Involved in dendritic spine morphogenesis by mediating the EFNA1-EPHA4 signaling. Activator of TPKII. The complex p35/CDK5 participates in the regulation of the circadian clock by modulating the function of CLOCK protein: phosphorylates CLOCK at 'Thr-451' and 'Thr-461' and regulates the transcriptional activity of the CLOCK-BMAL1 heterodimer in association with altered stability and subcellular distribution.
Cellular Location	[Cyclin-dependent kinase 5 activator 1, p35]: Cell membrane; Lipid-anchor; Cytoplasmic side. Cell projection, neuron projection. Note=In the primary cortical neurons, p35 is present in the peripheries and nerve terminals.

Tissue Location Brain and neuron specific.

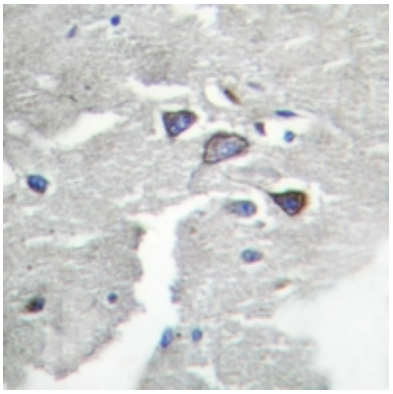
References

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Patrick G.N.,et al.Nature 402:615-622(1999).
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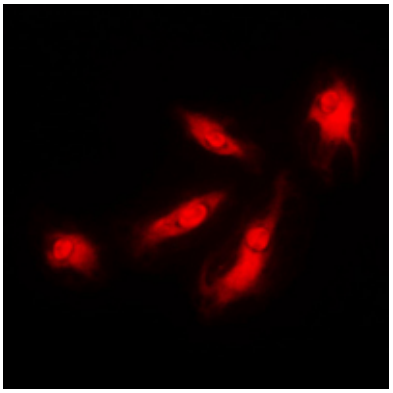
Images



Western blot analysis of CDK5R1 p35 expression in U87MG (A), EC9706 (B), SHSY5Y (C) whole cell lysates. (Predicted band size: 34 kD; Observed band size: 34 kD)



Immunohistochemical analysis of CDK5R1 p35 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CDK5R1 p35 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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