

PAKβ Polyclonal Antibody

Catalog No: YT3580

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: PAKβ

Fields: >>ErbB signaling pathway;>>Ras signaling pathway;>>Axon guidance;>>Focal

adhesion;>>T cell receptor signaling pathway;>>Regulation of actin cytoskeleton;>>Pathogenic Escherichia coli infection;>>Salmonella

infection;>>Human immunodeficiency virus 1 infection;>>Renal cell carcinoma

Gene Name: PAK3

Protein Name: Serine/threonine-protein kinase PAK 3

075914

Q61036

Human Gene Id: 5063

Human Swiss Prot

No:

Mouse Gene ld: 18481

Mouse Swiss Prot

No:

Rat Gene ld: 29433

Rat Swiss Prot No: Q62829

Immunogen: The antiserum was produced against synthesized peptide derived from human

PAK3. AA range:121-170

Specificity: PAKβ Polyclonal Antibody detects endogenous levels of PAKβ protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

1/3



Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 72kD

Cell Pathway: ErbB_HER;Axon guidance;Focal adhesion;T_Cell_Receptor;Regulates Actin

and Cytoskeleton; Renal cell carcinoma;

Background: The protein encoded by this gene is a serine-threonine kinase and forms an

activated complex with GTP-bound RAS-like (P21), CDC2 and RAC1. This protein may be necessary for dendritic development and for the rapid cytoskeletal reorganization in dendritic spines associated with synaptic plasticity. Defects in this gene are the cause of non-syndromic mental retardation X-linked type 30 (MRX30), also called X-linked mental retardation type 47 (MRX47). Alternatively spliced transcript variants encoding different isoforms have been identified.

[provided by RefSeq, Apr 2016],

Function: catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,cofactor:Magnesium.,disease:Defects in PAK3 are the cause of mental retardation X-linked type 30 (MRX30) [MIM:300558]; also called X-linked mental retardation type 47 (MRX47). Mental retardation is a mental disorder characterized by significantly sub-average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. Non-syndromic mental retardation patients do not manifest other clinical signs.,enzyme regulation:Activated by binding small G proteins. Binding of GTP-bound CDC42 or RAC1 to the autoregulatory region releases monomers from the autoinhibited dimer, enables phosphorylation of Thr-436 and allows the kinase domain to adopt an active structure.,function:Key regulator of

synapse formation and plasticity in the hippocampus., PTM: Autophosphorylated

whe

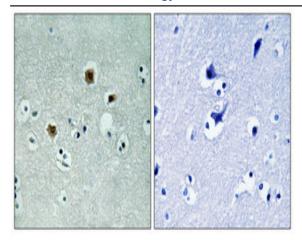
Subcellular Location:

Cytoplasm.

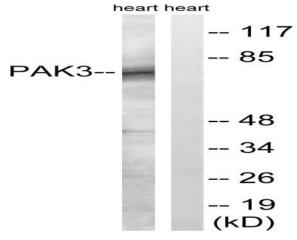
Expression: Restricted to the nervous system. Highly expressed in postmitotic neurons of the

developing and postnatal cerebral cortex and hippocampus.

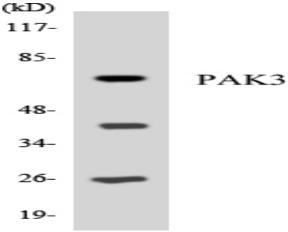
Products Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from rat heart cells, using PAK3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using PAK3 antibody.