

## PAK $\beta$ (Phospho Ser154) Rabbit pAb

CatalogNo: YP0795

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 72kD (Observed)

#### Isotype

- IgG

### Storage

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

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

### Recommended Dilution Ratios

**WB 1:500-1:2000**

**IHC 1:100-1:300**

**ELISA 1:20000**

**IF 1:50-200**

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human PAK3 around the phosphorylation site of Ser154. AA range:121-170

## Specificity

Phospho-PAK $\beta$  (S154) Polyclonal Antibody detects endogenous levels of PAK $\beta$  protein only when phosphorylated at S154. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites): YMsFT

## Target Information

**Gene name** PAK3

**Protein Name** Serine/threonine-protein kinase PAK 3

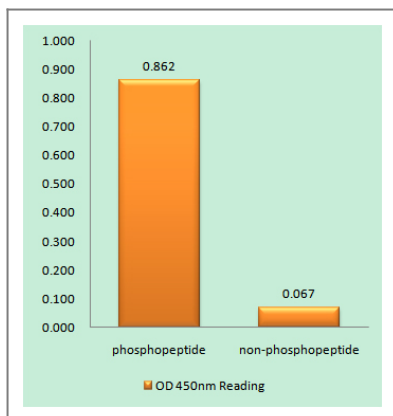
Organism	Gene ID	UniProt ID
Human	<a href="#">5063</a> ;	<a href="#">O75914</a> ;
Mouse	<a href="#">18481</a> ;	<a href="#">Q61036</a> ;
Rat	<a href="#">29433</a> ;	<a href="#">Q62829</a> ;

**Cellular Localization** Cytoplasm .

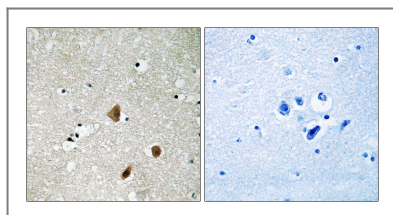
**Tissue specificity** Restricted to the nervous system. Highly expressed in postmitotic neurons of the developing and postnatal cerebral cortex and hippocampus.

**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 when activated by CDC42/p21. ,similarity:Belongs to the protein kinase superfamily. ,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. ,similarity:Contains 1 CRIB domain. ,similarity:Contains 1 protein kinase domain. ,subunit:Interacts tightly with GTP-bound but not GDP-bound CDC42/p21 and RAC1. Shows highly specific binding to the SH3 domains of phospholipase C-gamma and of adapter protein NCK. ,tissue specificity:Highly expressed in postmitotic neurons of the developing and postnatal cerebral cortex and hippocampus. ,

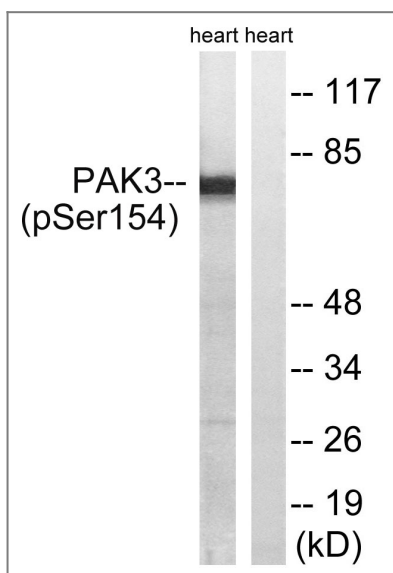
## Validation Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PAK3 (Phospho-Ser154) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using PAK3 (Phospho-Ser154) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from rat heart, using PAK3 (Phospho-Ser154) Antibody. The lane on the right is blocked with the phospho peptide.

## Contact information

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Please scan the QR code to access additional product information:  
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