

# PYK2 (PT0144R) PT™ Rabbit mAb

CatalogNo: YM8445 Recombinant R

## **Key Features**

**Host Species** 

Rabbit

MW
• 116kD (Calculated)
116kD (Observed)

Reactivity

· Human, Mouse, Rat

Isotype

IgG,Kappa

**Applications** 

WB,IHC,IF,IP,ELISA

#### Recommended Dilution Ratios

IHC 1:1000-1:4000 WB 1:2000-1:10000 IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

#### Storage

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

**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

## **Basic Information**

**Clonality** Monoclonal

Clone Number PT0144R

# Immunogen Information

**Specificity** Endogenous

### | Target Information

Gene name

PTK2B

**Protein Name** 

Protein-tyrosine kinase 2-beta

Organism	Gene ID	UniProt ID
Human	<u>2185;</u>	<u>Q14289;</u>
Mouse	<u>19229;</u>	Q9QVP9;
Rat	<u>50646;</u>	<u>P70600;</u>

#### Cellular Localization

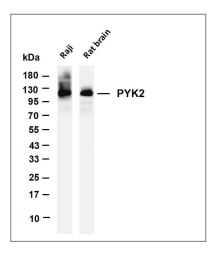
Cytoplasm, Cytoplasm, perinuclear region, Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, focal adhesion. Cell projection, lamellipodium. Cytoplasm, cell cortex. Nucleus. Interaction with NPHP1 induces the membrane-association of the kinase. Colocalizes with integrins at the cell periphery.

**Tissue specificity** Most abundant in the brain, with highest levels in amygdala and hippocampus. Low levels in kidney (at protein level). Also expressed in spleen and lymphocytes.

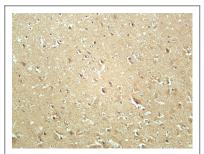
#### **Function**

Catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate., Function: Involved in calcium induced regulation of ion channel and activation of the map kinase signaling pathway. May represent an important signaling intermediate between neuropeptide activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal activity. Interacts with the SH2 domain of Grb2. May phosphorylate the voltage-gated potassium channel protein Kv1.2. Its activation is highly correlated with the stimulation of c-Jun N-terminal kinase activity. Involved in osmotic stress-dependent SNCA 'Tyr-125' phosphorylation., PTM: Phosphorylated on tyrosine residues in response to various stimuli that elevate the intracellular calcium concentration, as well as by PKC activation. Recruitment by nephrocystin to cell matrix adhesions initiates Tyr-402 phosphorylation. In monocytes, adherence to substrata is required for tyrosine phosphorylation and kinase activation. Angiotensin II, thapsigargin and L-alpha-lysophosphatidic acid (LPA) also induce autophosphorylation and increase kinase activity., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily., similarity: Contains 1 FERM domain., similarity: Contains 1 protein kinase domain...subcellular location:Interaction with nephrocystin induces the membraneassociation of the kinase., subunit:Interacts with Crk-associated substrate (Cas), PTPNS1 and SH2D3C (By similarity). Interacts with nephrocystin, ASAP2, OPHN1L, SKAP2 and TGFB1I1., tissue specificity: Most abundant in the brain, with highest levels in amygdala and hippocampus. Low levels in kidney. Also expressed in spleen and lymphocytes.,

### Validation Data



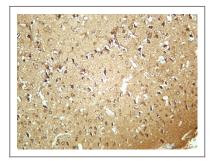
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PYK2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Raji Lane 2: Rat brain Predicted band size: 116kDa Observed band size: 116kDa



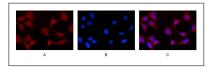
Human brain was stained with anti-PYK2 rabbit antibody



Mouse brain was stained with anti-PYK2 rabbit antibody



Rat brain was stained with anti-PYK2 rabbit antibody



Immunofluorescence analysis of HEK293. Picture A: PYK2 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

## | Contact information

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Please scan the QR code to access additional product information:

PYK2 (PT0144R)

PT™ Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents