

## PYK2 (phospho Tyr881) Polyclonal Antibody

Catalog No: YP0609

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: PYK2

**Fields:** >> Calcium signaling pathway;>> Chemokine signaling

pathway;>>Phospholipase D signaling pathway;>>Natural killer cell mediated cytotoxicity;>>Leukocyte transendothelial migration;>>GnRH signaling pathway;>>Yersinia infection;>>Hepatitis B;>>Human cytomegalovirus

infection;>>Human immunodeficiency virus 1 infection

Gene Name: PTK2B

**Protein Name:** Protein-tyrosine kinase 2-beta

Q14289

Q9QVP9

Human Gene Id: 2185

**Human Swiss Prot** 

No:

Mouse Gene ld: 19229

**Mouse Swiss Prot** 

No:

Rat Gene ld: 50646

Rat Swiss Prot No: P70600

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

PYK2 around the phosphorylation site of Tyr881. AA range:847-896

**Specificity:** Phospho-PYK2 (Y881) Polyclonal Antibody detects endogenous levels of PYK2

protein only when phosphorylated at Y881.

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

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Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. 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: 116kD

Cell Pathway: Calcium; Chemokine; Natural killer cell mediated cytotoxicity; Leukocyte

transendothelial migration;GnRH;

**Background:** This gene encodes a cytoplasmic protein tyrosine kinase which is involved in

calcium-induced regulation of ion channels and activation of the map kinase signaling pathway. The encoded protein may represent an important signaling intermediate between neuropeptide-activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal activity. The encoded protein undergoes rapid tyrosine phosphorylation and activation in response to increases in the intracellular calcium concentration, nicotinic acetylcholine receptor activation, membrane depolarization, or protein kinase C activation. This protein has been shown to bind CRK-associated substrate, nephrocystin, GTPase regulator associated with FAK, and the SH2 domain of GRB2. The encoded protein is a member of the FAK subfamily of protein tyrosine

kinases but lacks significant sequence similarity t

**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

Subcellular Location:

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.

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**Expression:** 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.

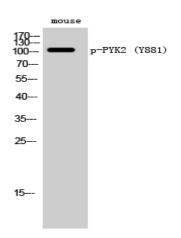
Tag: hot

**Sort :** 13184

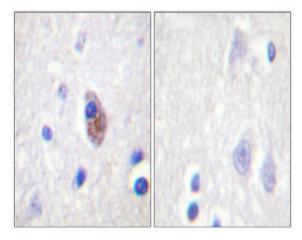
Host: Rabbit

Modifications: Phospho

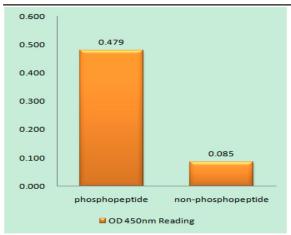
## **Products Images**



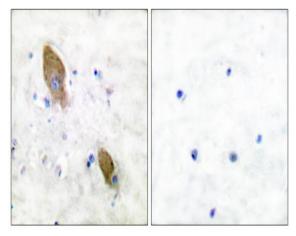
Western Blot analysis of mouse cells using Phospho-PYK2 (Y881) Polyclonal Antibody



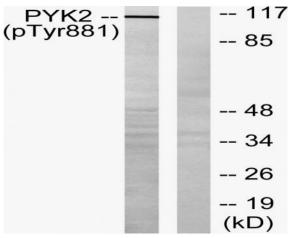
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PYK2 (Phospho-Tyr881) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using PYK2 (Phospho-Tyr881) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from mouse brain, using PYK2 (Phospho-Tyr881) Antibody. The lane on the right is blocked with the phospho peptide.