Immunoway
Best Tools for immunology Research

PYK2 Monoclonal Antibody

Catalog No :	YM0543
Reactivity :	Human
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
Human Gene Id :	2185
Human Swiss Prot No :	Q14289
Mouse Swiss Prot No :	Q9QVP9
Immunogen :	Purified recombinant fragment of PYK2 (aa815-997) expressed in E. Coli.
Specificity :	PYK2 Monoclonal Antibody detects endogenous levels of PYK2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 116kD

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

P References :
1. Exp Hematol. 2004 Apr;32(4):365-74.
2. J Cell Sci. 2004 May 15;117(Pt 12):2557-68.
3. Int J Cancer. 2005 Feb 20;113(5):689-98.

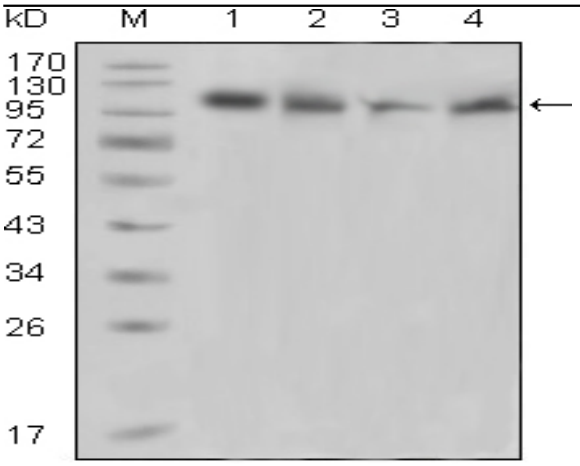
Background : This gene encodes a cytoplasmic protein tyrosine kinase which is involved in calcium-induced regulation of ion channels and activation of the map kinase signaling pathway. The encoded protein may represent an important signaling intermediate between neuropeptide-activated receptors or neurotransmitters 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

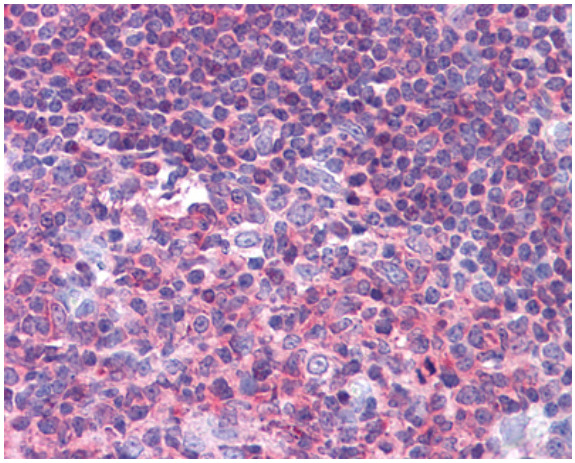
Subcellular Location : Cytoplasm. Cytoplasm, perinuclear region. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, focal adhesion. Cell projection, lamellipodium. Cytoplasm, cell cortex. Nucleus. Interaction with NPHP1 induces the membrane-association of the kinase. Colocalizes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

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.

Products Images



Western Blot analysis using PYK2 Monoclonal Antibody against Raji (1), PMA induced THP-1 (2), Jurkat (3) and Ramos (4) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human Tonsil tissues with AEC staining using PYK2 Monoclonal Antibody.