

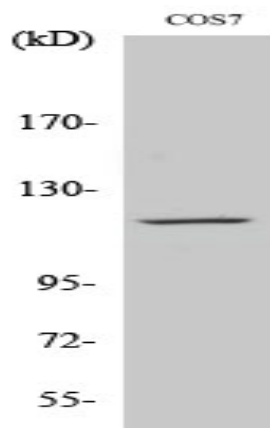
PYK2 Polyclonal Antibody

Catalog No :	YT3912
Reactivity :	Human;Mouse;Rat;Monkey
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 Gene Id :	19229
Mouse Swiss Prot No :	Q9QVP9
Rat Gene Id :	50646
Rat Swiss Prot No :	P70600
Immunogen :	The antiserum was produced against synthesized peptide derived from human PYK2. AA range:546-595
Specificity :	PYK2 Polyclonal Antibody detects endogenous levels of PYK2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

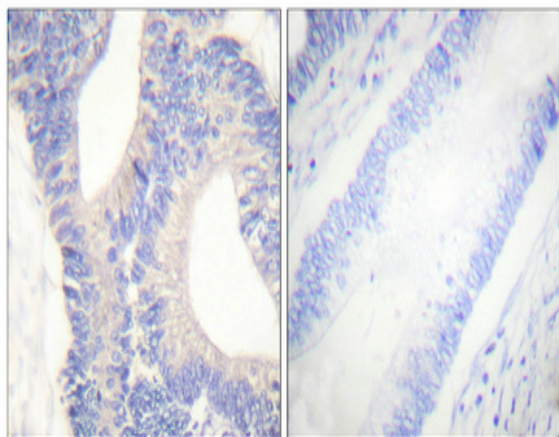
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	115kD
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.
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.

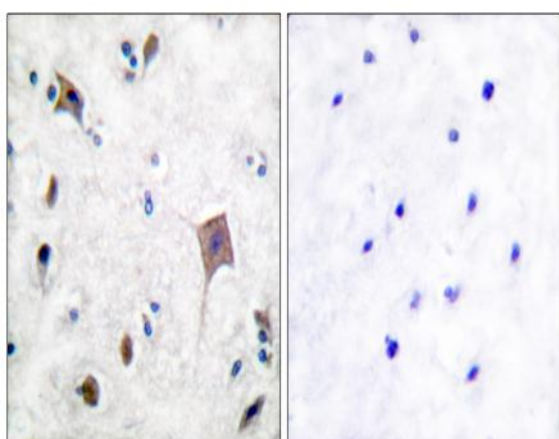
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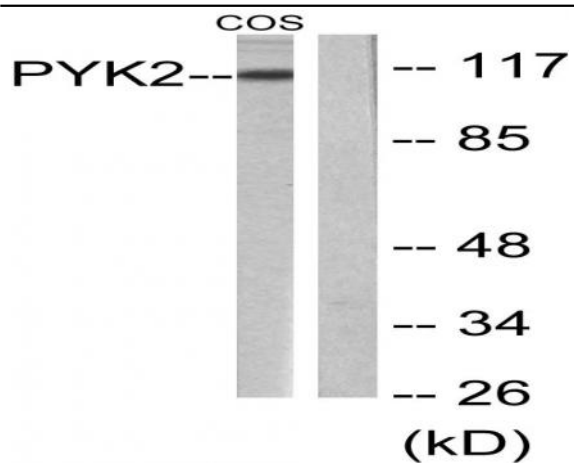
Western Blot analysis of various cells using PYK2 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PYK2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COS cells, treated with UV 15', using PYK2 Antibody. The lane on the right is blocked with the synthesized peptide.