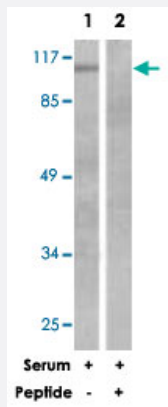


PTK2B polyclonal antibody

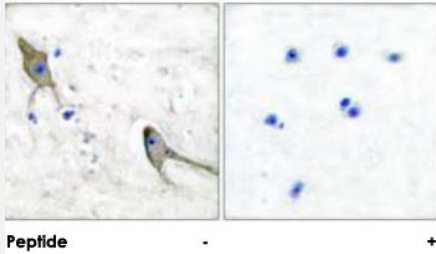
Catalog # PAB18132 Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, treated with Serum (20 %, 30 mins), using PTK2B polyclonal antibody (Cat # PAB18132).
Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using PTK2B polyclonal antibody (Cat # PAB18132).
Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PTK2B.
Immunogen	A synthetic peptide corresponding to human PTK2B.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to PTK2B.
Form	Liquid

Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:20000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, treated with Serum (20 %, 30 mins), using PTK2B polyclonal antibody (Cat # PAB18132).

Peptide "+" means "peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using PTK2B polyclonal antibody (Cat # PAB18132).

Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PTK2B

Entrez GeneID	2185
Protein Accession#	Q14289
Gene Name	PTK2B
Gene Alias	CADTK, CAKB, FADK2, FAK2, FRNK, PKB, PTK, PYK2, RAFTK
Gene Description	PTK2B protein tyrosine kinase 2 beta
Omim ID	601212
Gene Ontology	Hyperlink

Gene Summary

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 to kinases from other subfamilies. Four transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

CAK beta|OTTHUMP00000128275|OTTHUMP00000162913|calcium-dependent tyrosine kinase|cell adhesion kinase beta|focal adhesion kinase 2|proline-rich tyrosine kinase 2|protein kinase B|protein tyrosine kinase 2 beta|related adhesion focal tyrosine kinase

Publication Reference

- [PYK2 mediates anti-apoptotic AKT signaling in response to benzo\[a\]pyrene diol epoxide in mammary epithelial cells.](#)

Burdick AD, Initski-Steele ID, Lauer FT, Burchiel SW.

Carcinogenesis 2006 Nov; 27(11):2331.

Application: WB-Ce, Human, MCF10A cells

- [Implication of phospholipase D2 in oxidant-induced phosphoinositide 3-kinase signaling via Pyk2 activation in PC12 cells.](#)

Banno Y, Ohguchi K, Matsumoto N, Koda M, Ueda M, Hara A, Dikic I, Nozawa Y.

The Journal of Biological Chemistry 2005 Apr; 280(16):16319.

Application: IP, WB, Rat, PC-12 cells

- [Cardiomyocyte apoptosis triggered by RAFTK/pyk2 via Src kinase is antagonized by paxillin.](#)

Melendez J, Turner C, Avraham H, Steinberg SF, Schaefer E, Sussman MA.

Journal of Biological Chemistry 2004 Dec; 279(51):53516.

Pathway

- [Calcium signaling pathway](#)
- [Chemokine signaling pathway](#)
- [GnRH signaling pathway](#)

- [Leukocyte transendothelial migration](#)
- [Natural killer cell mediated cytotoxicity](#)

Disease

- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Hypertension](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Melanoma](#)
- [Skin Neoplasms](#)
- [Tobacco Use Disorder](#)