



Human PTK2B (phospho T579) blocking peptide (DAG-P1865)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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, Jul 2008]
Specificity	Most abundant in the brain, with highest levels in amygdala and hippocampus. Low levels in kidney. Also expressed in spleen and lymphocytes.
Conjugate	Unconjugated
Applications	BL
Sequence Similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily. Contains 1 FERM domain. Contains 1 protein kinase domain.
Format	Liquid
Buffer	pH: 8.50 Constituents: 10% DMSO, 0.6% Tris, 0.15% EDTA, 0.1% BSA
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. pH:

GENE INFORMATION

Gene Name	PTK2B protein tyrosine kinase 2 beta [Homo sapiens (human)]
Official Symbol	PTK2B
Synonyms	PTK2B; protein tyrosine kinase 2 beta; PKB; PTK; CAKB; FAK2; PYK2; CADTK; FADK2; RAFTK; protein-tyrosine kinase 2-beta; FADK 2; CAK-beta; protein kinase B; focal adhesion kinase 2; cell adhesion kinase beta; proline-rich tyrosine kinase 2; calcium-dependent tyrosine kinase; PTK2B protein tyrosine kinase 2 beta; related adhesion focal tyrosine kinase; calcium-regulated non-receptor proline-rich tyrosine kinase;
Entrez Gene ID	2185
mRNA Refseq	NM_004103.4
Protein Refseq	NP_004094.3
UniProt ID	Q14289
Chromosome Location	8p21.1
Pathway	Alpha-synuclein signaling, organism-specific biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; BDNF signaling pathway, organism-specific biosystem; CXCR4-mediated signaling events, organism-specific biosystem; Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; Cell-Cell communication, organism-specific biosystem; Chemokine signaling pathway, organism-specific biosystem; Chemokine signaling pathway, conserved biosystem;
Function	3-phosphoinositide-dependent protein kinase binding; ATP binding; non-membrane spanning protein tyrosine kinase activity; protein binding; protein complex binding; protein tyrosine kinase activity; signal transducer activity;