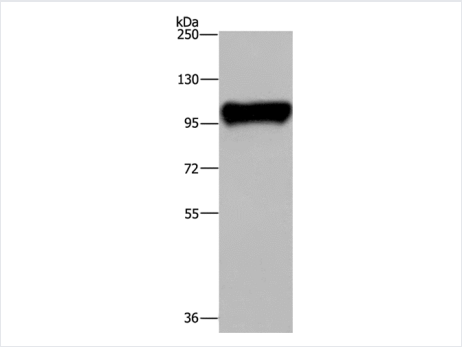
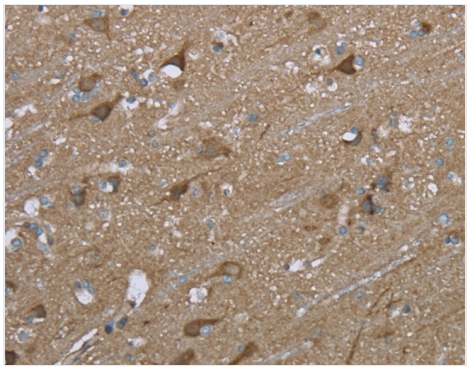
PTK2B Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

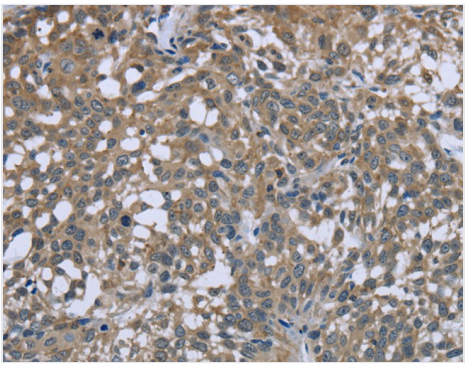
Product Name	PTK2B, Polyclonal Antibody
Full Product Name	PTK2B Polyclonal Antibody
Product Gene Name	anti-PTK2B antibody
Product Synonym Names	PKB; PTK; CAKB; FAK2; PYK2; CADTK; FADK2; RAFTK
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Purity/Purification	Antigen affinity purification
Concentration	2.1mg/mL (lot specific)
Preparation and Storage	Store at -20 degree C (regular) and -80 degree C (long term). Avoid freeze / thaw cycles.
Molecular Weight	111,183 Da
OMIM	601212
Immunogen	Recombinant protein of human PTK2B
Buffer	PBS with 0.05% sodium azide, 50% glycerol, pH7.3
Product Categories/Family for anti-PTK2B antibody	Cancer
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-PTK2B antibody	ELISA (EIA), Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-PTK2B antibody	WB: 1:500-1:2000 IHC: 1:50-1:200
Related Product Information for anti-PTK2B antibody	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.
Other Notes	Small volumes of anti-PTK2B antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PTK2B purchase	MBS2525779 is an antibody targeting PTK2B. Also known as PTK2B Polyclonal Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



Western Blot (WB) of anti-PTK2B antibody
Western Blot analysis of Raji cell using PTK2B Polyclonal Antibody at dilution of 1:300



Immunohistochemistry (IHC) of anti-PTK2B antibody
Immunohistochemistry of paraffin-embedded Human brain using PTK2B Polyclonal Antibody at dilution of 1:50



Immunohistochemistry (IHC) of anti-PTK2B antibody
Immunohistochemistry of paraffin-embedded Human cervical cancer using PTK2B Polyclonal Antibody at dilution of 1:50

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PTK2B. It may not necessarily be applicable to this product.

NCBI GI #	27886590
NCBI GeneID	2185
NCBI Accession #	NP_775268.1
UniProt Secondary Accession #	Q13475; Q14290; Q16709; Q6PID4; D3DST0
UniProt Related Accession #	Q14289
GenBank Nucleotide #	NM_173176.2
NCBI Official Full Name	protein-tyrosine kinase 2-beta isoform a
NCBI Official Synonym Full Names	protein tyrosine kinase 2 beta
NCBI Official Symbol	PTK2B
NCBI Official Synonym Symbols	PKB; PTK; CAKB; FAK2; PYK2; CADTK; FADK2; RAFTK
UniProt Protein Name	Protein-tyrosine kinase 2-beta
UniProt Synonym Protein Names	Calcium-dependent tyrosine kinase; CADTK; Calcium-regulated non-receptor proline-rich tyrosine kinase; Cell adhesion kinase beta; CAK-beta; CAKB; Focal adhesion kinase 2; FADK 2; Proline-rich tyrosine kinase 2; Related adhesion focal tyrosine kinase; RAFTK
Protein Family	Protein-tyrosine kinase
UniProt Gene Name	PTK2B
UniProt Synonym Gene Names	FAK2; PYK2; RAFTK; CADTK; CAK-beta; CAKB; FADK 2; RAFTK

UniProt Entry Name	FAK2_HUMAN
NCBI Protein Information	protein-tyrosine kinase 2-beta; CAK-beta; FADK 2; PTK2B protein tyrosine kinase 2 beta; calcium-dependent tyrosine kinase; calcium-regulated non-receptor proline-rich tyrosine kinase; cell adhesion kinase beta; focal adhesion kinase 2; proline-rich tyrosine kinase 2; protein kinase B; related adhesion focal tyrosine kinase
NCBI Summary for PTK2B	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]
UniProt Comments for PTK2B	Pyk2: a nonreceptor tyrosine kinase of the Fak family. Predominantly expressed in the cells derived from hematopoietic lineages and in the central nervous system. Pyk2 is one of the signaling mediators for G-protein-coupled receptors. Involved in calcium induced regulation of ion channel and activation of the map kinase signaling pathway. 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. It plays an important role in cell motility such as spreading and migration. Two alternatively spliced isoforms have been described. Protein type: EC 2.7.10.2; Kinase, protein; Protein kinase, TK; Nuclear receptor co-regulator; Protein kinase, tyrosine (non-receptor); TK group; Fak family Chromosomal Location of Human Ortholog: 8p21.1 Cellular Component: focal adhesion; postsynaptic density; dendrite; cell cortex; cytosol; lipid raft; N-methyl-D-aspartate selective glutamate receptor complex; nucleoplasm; extrinsic to internal side of plasma membrane; cytoskeleton; growth cone; cell soma; axon; lamellipodium; perinuclear region of cytoplasm; cytoplasm; nucleus Molecular Function: signal transducer activity; protein binding; calmodulin-dependent protein kinase activity; protein-tyrosine kinase activity; N-methyl-D-aspartate selective glutamate receptor activity; 3-phosphoinositide-dependent protein kinase binding; protein complex binding; non-membrane spanning protein tyrosine kinase activity; ATP binding; receptor binding Biological Process: focal adhesion formation; positive regulation of JNK activity; regulation of nitric oxide biosynthetic process; regulation of cGMP biosynthetic process; protein amino acid phosphorylation; glial cell proliferation; negative regulation of bone mineralization; regulation of cell shape; regulation of inositol trisphosphate biosynthetic process; elevation of cytosolic calcium ion concentration; cell surface receptor linked signal transduction; tumor necrosis factor-mediated signaling pathway; response to glucose stimulus; protein complex assembly; negative regulation of neuron apoptosis; neurite development; bone resorption; response to drug; negative regulation of myeloid cell differentiation; positive regulation of nitric-oxide synthase activity; response to osmotic stress; positive regulation of cell growth; marginal zone B cell differentiation; positive regulation of angiogenesis; positive regulation of peptidyl-tyrosine phosphorylation; response to ethanol; ionotropic glutamate receptor signaling pathway; response to mechanical stimulus; response to calcium ion; negative regulation of apoptosis; activation of JAK protein; peptidyl-tyrosine phosphorylation; response to cAMP; positive regulation of translation; blood vessel endothelial cell migration; apoptosis; response to lithium ion; negative regulation of potassium ion transport; protein amino acid autophosphorylation; response to hormone stimulus; positive regulation of JNK cascade; regulation of calcium-mediated signaling; signal transduction; positive regulation of synaptic transmission, glutamatergic; negative regulation of cell proliferation; positive regulation of cell proliferation; response to stress; angiogenesis; positive regulation of cell-matrix adhesion; regulation of cell adhesion; epidermal growth factor receptor signaling pathway; integrin-mediated signaling pathway; MAPKKK cascade; signal complex assembly; positive regulation of phosphoinositide 3-kinase activity; response to cocaine; oocyte maturation; regulation of release of sequestered calcium ion into cytosol; response to hydrogen peroxide; positive regulation of actin filament polymerization; positive regulation of protein kinase activity; stress fiber formation; response to hypoxia; cellular defense response; innate immune response; sprouting angiogenesis; vascular endothelial growth factor receptor signaling pathway; positive regulation of cell migration
Research Articles on PTK2B	**1.** Data indicate the tumor-promoting role of proline-rich tyrosine kinase 2 (Pyk2) in multiple myeloma (MM), suggesting tyrosine kinase inhibitor as a therapeutic option in MM.

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