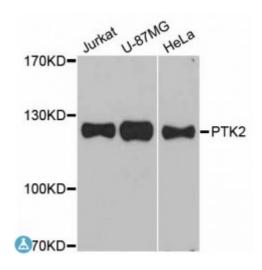


Anti-PTK2 Antibody



Description This gene encodes a cytoplasmic protein tyrosine kinase which is found

concentrated in the focal adhesions that form between cells growing in the presence of extracellular matrix constituents. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Activation of this gene may be an important early step in cell growth and intracellular signal transduction pathways triggered in response to certain neural peptides or to cell interactions with the extracellular matrix. Several transcript variants encoding different isoforms have been found for this

gene.

Model STJ114921

Host Rabbit

Reactivity Human

Applications WB

Immunogen A synthetic peptide corresponding to a sequence within amino acids 700-800

of human PTK2 (NP_722560.1).

Gene ID 5747

Gene Symbol PTK2

Dilution range WB 1:500 - 1:2000

Tissue Specificity Detected in B and T-lymphocytes, Isoform 1 and isoform 6 are detected in

lung fibroblasts (at protein level), Ubiquitous

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Focal adhesion kinase 1 FADK 1

Molecular Weight 119.233 kDa

Clonality Polyclonal

Unconjugated Conjugation

IgG Isotype

PBS with 0.02% sodium azide, 50% glycerol, pH7.3. **Formulation**

Store at -20C. Avoid freeze / thaw cycles. **Storage Instruction**

Database Links HGNC:9611OMIM:600758Reactome:R-HSA-111465

Alternative Names Focal adhesion kinase 1 FADK 1

Function Non-receptor protein-tyrosine kinase that plays an essential role in regulating

> cell migration, adhesion, spreading, reorganization of the actin cytoskeleton, formation and disassembly of focal adhesions and cell protrusions, cell cycle progression, cell proliferation and apoptosis, Required for early embryonic development and placenta development, Required for embryonic

> angiogenesis, normal cardiomyocyte migration and proliferation, and normal heart development, Regulates axon growth and neuronal cell migration, axon

branching and synapse formation

Cellular Localization Cell junction, focal adhesion, Cell membrane

Post-translational Phosphorylated on tyrosine residues upon activation, e.g., upon integrin signaling, Tyr-397 is the major autophosphorylation site, but other kinases can **Modifications**

also phosphorylate this residue, Phosphorylation at Tyr-397 promotes

interaction with SRC and SRC family members, leading to phosphorylation at

Tyr-576, Tyr-577 and at additional tyrosine residues, FGR promotes

phosphorylation at Tyr-397 and Tyr-576, FER promotes phosphorylation at Tyr-577, Tyr-861 and Tyr-925, even when cells are not adherent, Tyr-397, Tyr-576 and Ser-722 are phosphorylated only when cells are adherent, Phosphorylation at Tyr-397 is important for interaction with BMX, PIK3R1 and SHC1, Phosphorylation at Tyr-925 is important for interaction with

GRB2, Dephosphorylated by PTPN11

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