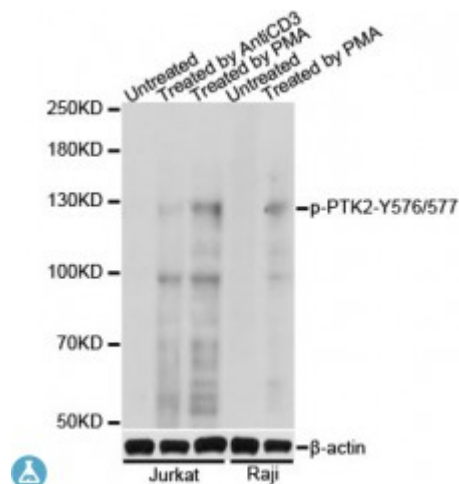


## Anti-Phospho-PTK2-(Y576/577) Antibody



### 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.

|                           |                                                                                                                          |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Model</b>              | STJ117876                                                                                                                |
| <b>Host</b>               | Rabbit                                                                                                                   |
| <b>Reactivity</b>         | Human                                                                                                                    |
| <b>Applications</b>       | WB                                                                                                                       |
| <b>Immunogen</b>          | A phospho specific peptide corresponding to residues surrounding Y576/577 of human PTK2                                  |
| <b>Gene ID</b>            | <a href="#">5747</a>                                                                                                     |
| <b>Gene Symbol</b>        | <a href="#">PTK2</a>                                                                                                     |
| <b>Dilution range</b>     | WB 1:500 - 1:2000                                                                                                        |
| <b>Tissue Specificity</b> | Detected in B and T-lymphocytes, Isoform 1 and isoform 6 are detected in lung fibroblasts (at protein level), Ubiquitous |
| <b>Purification</b>       | Affinity purification                                                                                                    |
| <b>Note</b>               | For Research Use Only (RUO).                                                                                             |

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|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Protein Name</b>                     | Focal adhesion kinase 1 FADK 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Molecular Weight</b>                 | 119.233 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clonality</b>                        | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Conjugation</b>                      | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Isotype</b>                          | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Formulation</b>                      | PBS with 0.02% sodium azide, 50% glycerol, pH7.3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Instruction</b>              | Store at -20C. Avoid freeze / thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Database Links</b>                   | <a href="#">HGNC:9611</a> <a href="#">OMIM:600758</a> <a href="#">Reactome:R-HSA-111465</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Alternative Names</b>                | Focal adhesion kinase 1 FADK 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Function</b>                         | 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                                                                                                                                                                                                       |
| <b>Cellular Localization</b>            | Cell junction, focal adhesion, Cell membrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Post-translational Modifications</b> | Phosphorylated on tyrosine residues upon activation, e.g, upon integrin signaling, Tyr-397 is the major autophosphorylation site, but other kinases can 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 |