

## FAK (phospho Tyr925) Polyclonal Antibody

YP0109 Catalog No:

Reactivity: Human; Mouse; Rat

WB;IHC;IF;ELISA **Applications:** 

Target: FAK

Fields: >>Endocrine resistance;>>ErbB signaling pathway;>>Chemokine signaling

> pathway;>>PI3K-Akt signaling pathway;>>Axon guidance;>>VEGF signaling pathway;>>Focal adhesion;>>Leukocyte transendothelial migration;>>Regulation

of actin cytoskeleton;>>Growth hormone synthesis, secretion and action;>>Bacterial invasion of epithelial cells;>>Shigellosis;>>Yersinia infection;>>Amoebiasis;>>Human cytomegalovirus infection;>>Human

papillomavirus infection;>>Human immunodeficiency virus 1

infection;>>Pathways in cancer;>>Transcriptional misregulation in

cancer;>>Proteoglycans in cancer;>>Chemical carcinogenesis - reactive oxygen species;>>Small cell lung cancer;>>Lipid and atherosclerosis;>>Fluid shear

stress and atherosclerosis

Gene Name: PTK2

**Protein Name:** Focal adhesion kinase 1

**Human Gene Id:** 5747

**Human Swiss Prot** 

No:

No:

Mouse Gene Id: 14083

**Mouse Swiss Prot** 

Rat Gene Id:

25614

P34152

Q05397

Rat Swiss Prot No: O35346

The antiserum was produced against synthesized peptide derived from human Immunogen:

FAK around the phosphorylation site of Tyr925. AA range:892-941



Specificity: Phospho-FAK (Y925) Polyclonal Antibody detects endogenous levels of FAK

protein only when phosphorylated at Y925.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 125kD

Cell Pathway: ErbB\_HER;Chemokine;Axon guidance;VEGF;Focal adhesion;Leukocyte

transendothelial migration; Regulates Actin and Cytoskeleton; Pathways in

cancer; Small cell lung cancer;

**Background:** protein tyrosine kinase 2(PTK2) Homo sapiens 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, but the full-length natures of only four of them have been determined. [provided by

RefSeq, Oct 2015],

**Function :** catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine

phosphate.,domain:The carboxy-terminal region is the site of focal adhesion targeting (FAT) sequence which mediates the localization of FAK1 to focal adhesions.,domain:The first Pro-rich domain interacts with the SH3 domain of CRK-associated substrate (BCAR1) and CASL.,function:Non-receptor protein-

tyrosine kinase implicated in signaling pathways involved in cell motility, proliferation and apoptosis. Activated by tyrosine-phosphorylation in response to

either integrin clustering induced by cell adhesion or antibody cross-linking, or via G-protein coupled receptor (GPCR) occupancy by ligands such as bombesin or lysophosphatidic acid, or via LDL receptor occupancy. Plays a potential role in

oncogenic transformations resulting in increased kinase

activity.,PTM:Phosphorylated on 6 tyrosine residues upon activatio

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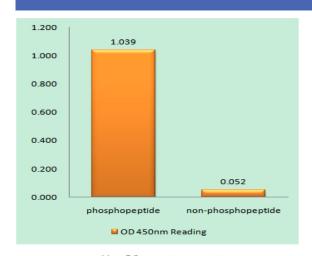
## Subcellular Location:

Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cell cortex. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Nucleus. Cytoplasm, cytoskeleton, cilium basal body . Constituent of focal adhesions. Detected at microtubules.

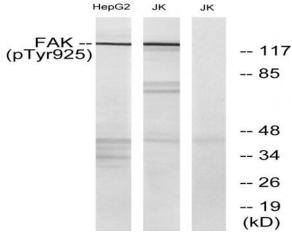
## **Expression:**

Detected in B and T-lymphocytes. Isoform 1 and isoform 6 are detected in lung fibroblasts (at protein level). Ubiquitous. Expressed in epithelial cells (at protein level) (PubMed:31630787).

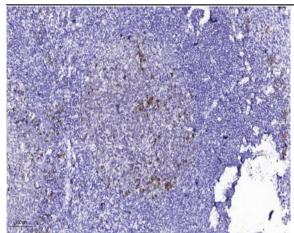
## **Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using FAK (Phospho-Tyr925) Antibody



Western blot analysis of lysates from Jurkat and HepG2 cells, using FAK (Phospho-Tyr925) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).