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Catalog No: YM1369

Reactivity: Human

**Applications:** WB;IF

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

**Human Gene Id:** 5747

**Human Swiss Prot** 

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No:

**Mouse Swiss Prot** 

No:

**Immunogen :** Purified recombinant human FAK protein fragments expressed in E.coli.

**Specificity:** This antibody detects endogenous levels of FAK and does not cross-react with

related proteins.

Q05397

P34152

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

**Source:** Monoclonal, Mouse

**Dilution:** wb 1:1000 icc 1:200. IF 1:50-200

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**Purification:** The antibody was affinity-purified from mouse ascites 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

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

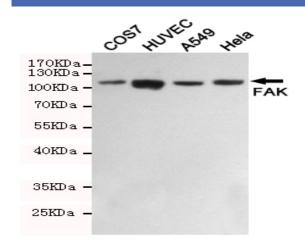
microtubules.

**Expression:** Detected in B and T-lymphocytes. Isoform 1 and isoform 6 are detected in lung

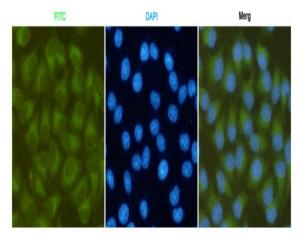
fibroblasts (at protein level). Ubiquitous. Expressed in epithelial cells (at protein

level) (PubMed:31630787).

## **Products Images**



Western blot detection of FAK in COS7,HUVEC,A549 and Hela cell lysates using FAK mouse mAb (1:1000 diluted).Predicted band size: 125KDa.Observed band size:125KDa.



Immunofluorescent analysis of Hela cells fixed fixed by anhydrous methanol at -20°C and using FAK mouse mAb (dilution 1:200).