

FAK Polyclonal Antibody

Catalog No :	YT1659
Reactivity :	Human;Mouse;Rat
Applications :	IF;WB;IHC;ELISA
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 :	Q05397
Mouse Gene Id :	14083
Mouse Swiss Prot No :	P34152
Rat Gene Id :	25614
Rat Swiss Prot No :	O35346
Immunogen :	The antiserum was produced against synthesized peptide derived from human FAK. AA range:809-858

Specificity :	FAK Polyclonal Antibody detects endogenous levels of FAK protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet tested in other applications.
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 :	120kD
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 nature 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

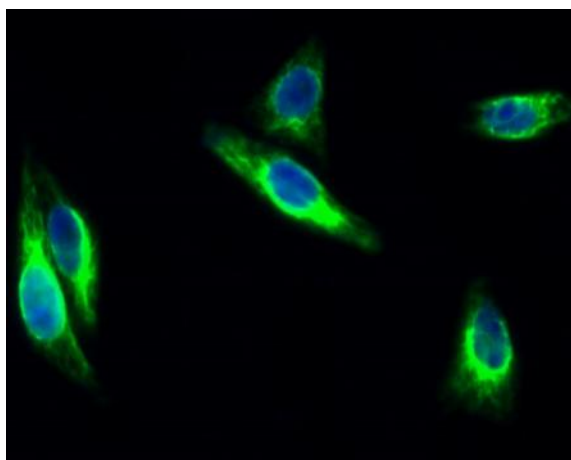
Subcellular Location :

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.

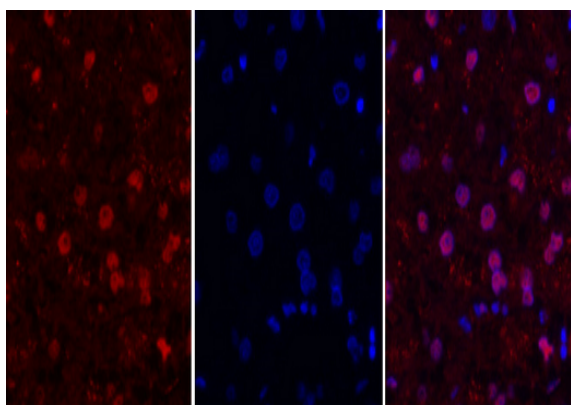
Expression :

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



Immunofluorescence analysis of HeLa cell. 1,FAK Polyclonal Antibody(green) was diluted at 1:200(4 ° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.

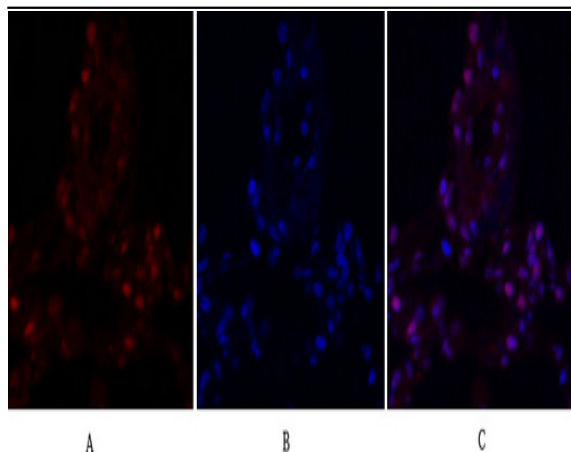


Immunofluorescence analysis of human-liver tissue. 1,FAK Polyclonal Antibody(red) was diluted at 1:200(4 ° C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

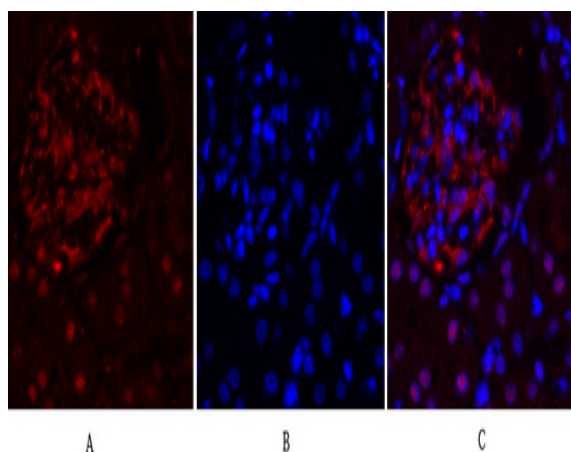
A

B

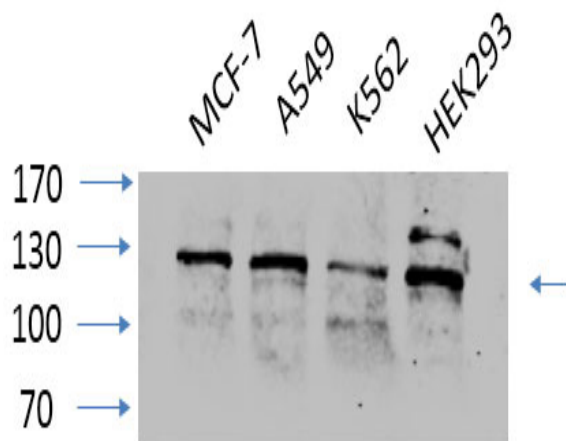
C



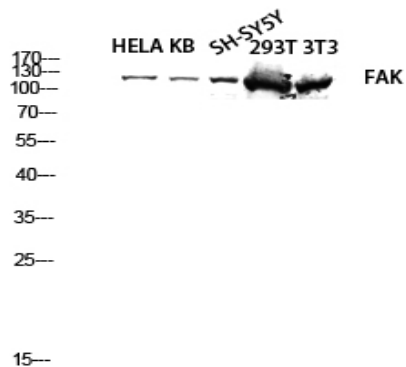
Immunofluorescence analysis of human-lung tissue. 1,FAK Polyclonal Antibody(red) was diluted at 1:200(4 °C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



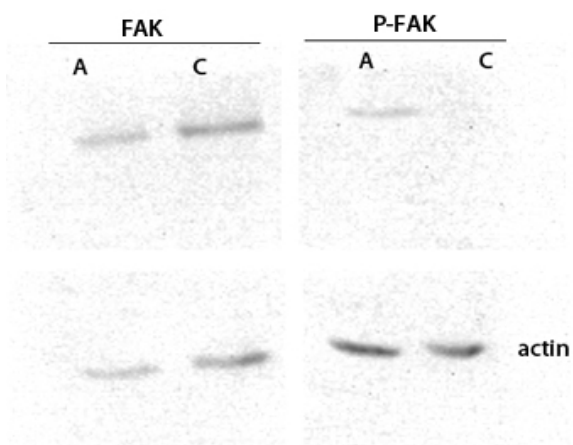
Immunofluorescence analysis of rat-kidney tissue. 1,FAK Polyclonal Antibody(red) was diluted at 1:200(4 °C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



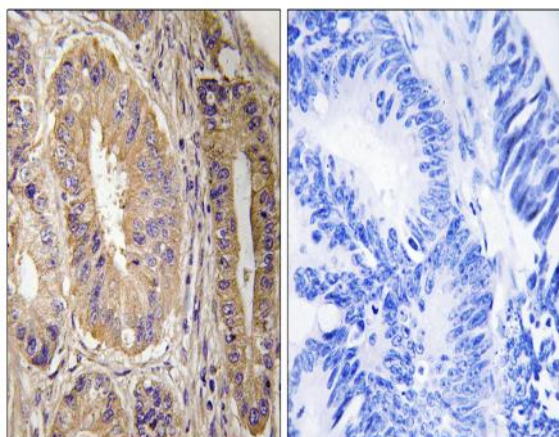
Western Blot analysis of various cells using primary antibody diluted at 1:1000(4 °C overnight). Secondary antibody:Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25 °C, 1 hour). Cell lysate was extracted by Minute™ Plasma Membrane Protein Isolation and Cell Fractionation Kit(SM-005, Inventbiotech,MN,USA).



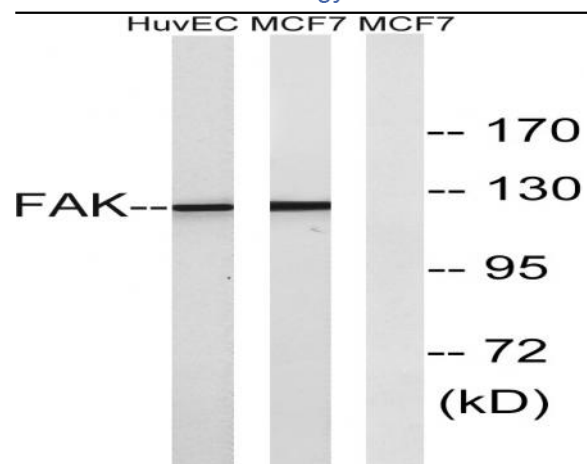
Western blot analysis of HELA KB SH-SY5Y 293T 3T3 lysis using FAK antibody. Antibody was diluted at 1:2000



Western blot analysis of customer's lysis using FAK antibody. Antibody was diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using FAK Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from MCF-7 and HUVEC cells, using FAK Antibody. The lane on the right is blocked with the synthesized peptide.