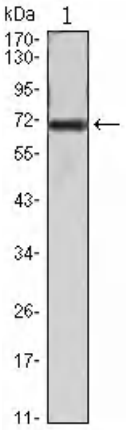
FAK Monoclonal Antibody

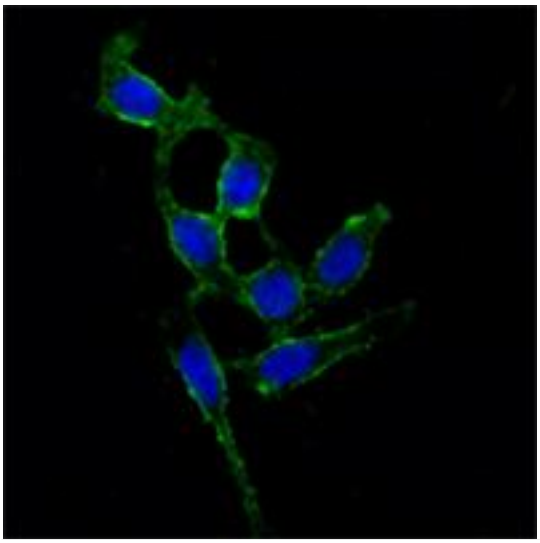
Catalog No	YP-Ab-14143
Isotype	IgG
Reactivity	Human
Applications	WB;IF;FCM;ELISA
Gene Name	PTK2
Protein Name	Focal adhesion kinase 1
Immunogen	Purified recombinant fragment of human FAK expressed in E. Coli.
Specificity	FAK Monoclonal Antibody detects endogenous levels of FAK protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PTK2; FAK; FAK1; Focal adhesion kinase 1; FADK 1; Focal adhesion kinase-related nonkinase; FRNK; Protein phosphatase 1 regulatory subunit 71; PPP1R71; Protein-tyrosine kinase 2; p125FAK; pp125FAK
Observed Band	
Cell Pathway	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.
Tissue Specificity	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).
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
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

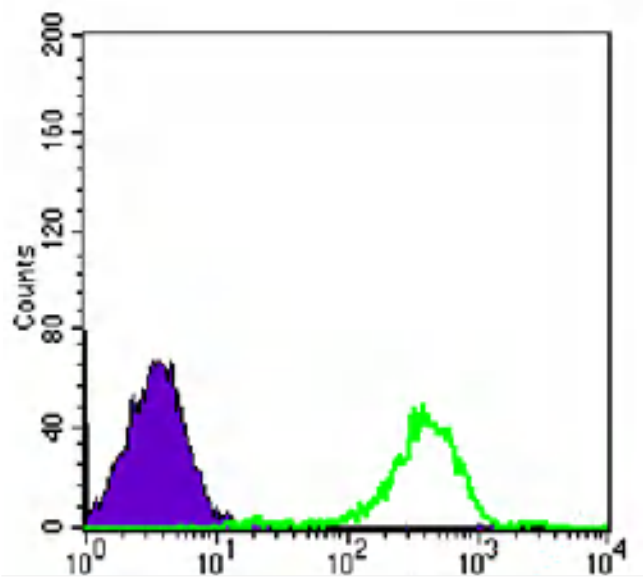
Products Images



Western Blot analysis using FAK Monoclonal Antibody against FAK-hIgGFc transfected HEK293 cell lysate.



Immunofluorescence analysis of A549 cells using FAK Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of Raji cells using FAK Monoclonal Antibody (green) and negative control (purple).