

Rabbit FAK1 Polyclonal Antibody | anti-PTK2 antibody

FAK1 Antibody (Y576)

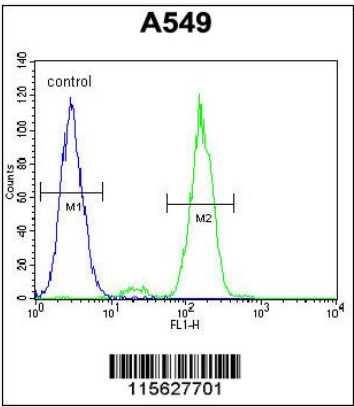
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA290706	Rabbit	Human; Predicted Reactivity: Chicken, Mouse, Rat, Xenopus	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

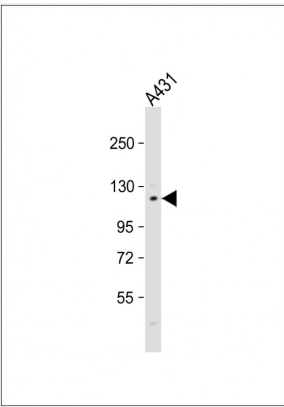
FAK1; Polyclonal Antibody; FAK1 Antibody (Y576); Focal adhesion kinase 1; FADK 1; Focal adhesion kinase-related nonkinase; FRNK; Protein phosphatase 1 regulatory subunit 71; PPP1R71; Protein-tyrosine kinase 2; p125FAK; pp125FAK; PTK2; FAK; anti-PTK2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human; Predicted Reactivity: Chicken, Mouse, Rat, Xenopus
Clonality	Polyclonal
Isotype	Ig
Specificity	This FAK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 557-587 amino acids from human FAK1.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Length	1065
Applicable Applications for anti-PTK2 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Subtitle	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Cellular Location	Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side Cytoplasm, cell cortex. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Note=Constituent of focal adhesions Detected at microtubules.
Tissue Location	Detected in B and T-lymphocytes. Isoform 1 and isoform 6 are detected in lung fibroblasts (at protein level) Ubiquitous.
Antigen Region	557-587 aa
Antigen Type	Synthetic Peptide
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



FCM/FACS (Flow Cytometry)
FAK1 Antibody (Y576) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



WB (Western Blot)
Anti-FAK1 Antibody (Y576) at 1:1000 dilution + A431 whole cell lysate. Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 119 kDa. Blocking/Dilution buffer: 5% NFD/MTBST.

ADDITIONAL INFORMATION

Related Product Information for anti-PTK2 antibody	Description: FAK1 is 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. This protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Activation of the gene encoding FAK1 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. Background: 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; required for normal development of the nervous system. Plays a role in osteogenesis and differentiation of osteoblasts. Functions in integrin signal transduction, but also in signaling downstream of numerous growth factor receptors, G-protein coupled receptors (GPCR), EPHA2, netrin receptors and LDL receptors. Forms multisubunit signaling complexes with SRC and SRC family members upon activation; this leads to the phosphorylation of additional tyrosine residues, creating binding sites for scaffold proteins, effectors and substrates. Regulates numerous signaling pathways. Promotes activation of phosphatidylinositol 3-kinase and the AKT1 signaling cascade. Promotes activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling cascade. Promotes localized and transient activation of guanine nucleotide exchange factors (GEFs) and GTPase-activating proteins (GAPs), and thereby modulates the activity of Rho family GTPases. Signaling via CAS family members mediates activation of RAC1. Recruits the ubiquitin ligase MDM2 to P53/TP53 in the nucleus, and thereby regulates P53/TP53 activity, P53/TP53 ubiquitination and proteasomal degradation. Phosphorylates SRC; this increases SRC kinase activity. Phosphorylates ACTN1, ARHGEF7, GRB7, RET and WASL. Promotes phosphorylation of PXN and STAT1; most likely PXN and STAT1 are phosphorylated by a SRC family kinase that is recruited to autophosphorylated PTK2/FAK1, rather than by PTK2/FAK1 itself. Promotes phosphorylation of BCAR1; GIT2 and SHC1; this requires both SRC and PTK2/FAK1. Promotes phosphorylation of BMX and PIK3R1. Isoform 6 (FRNK) does not contain a kinase domain and inhibits PTK2/FAK1 phosphorylation and signaling. Its enhanced expression can attenuate the nuclear accumulation of LPXN and limit its ability to enhance serum response factor (SRF)-dependent gene transcription.
Product Categories/Family for anti-PTK2 antibody	Primary Antibodies; Cancer; Cardiovascular; Signal Transduction
References	Okamoto, H., et al., Hepatology 38 (5):1242-1249 (2003). Moritake, H., et al., Cancer Genet. Cytogenet. 146 (2):102-109 (2003). Liu, X.W., et al., J. Biol. Chem. 278 (41):40364-40372 (2003). Avraham, H.K., et al., J. Biol. Chem. 278 (38):36661-36668 (2003). Giannoni, E., et al., J. Biol. Chem. 278 (38):36763-36776 (2003).

NCBI AND UNIPROT INFORMATION

NCBI GI #	313851044
NCBI GeneID	5747
NCBI Accession #	NP_001186578.1
NCBI GenBank Nucleotide #	NM_001199649.1
UniProt Accession #	Q05397; Q14291; Q8IYN9; Q9UD85; B4E2N6; F5H4S4; J3QT16
Molecular Weight	119233 Da
NCBI Official Full Name	focal adhesion kinase 1 isoform c
NCBI Official Synonym Full Names	protein tyrosine kinase 2
NCBI Official Symbol	PTK2
NCBI Official Synonym Symbols	FAK; FADK; FAK1; FRNK; PPP1R71; p125FAK; pp125FAK
NCBI Protein Information	focal adhesion kinase 1
UniProt Protein Name	Focal adhesion kinase 1
UniProt Gene Name	PTK2
UniProt Synonym Gene Names	FAK; FAK1; FADK 1; FRNK; PPP1R71
UniProt Entry Name	FAK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/fak1-antibody-flow-cytometry-western-blot-elisa/290706>