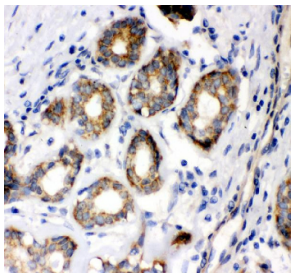
FAK Antibody / Focal Adhesion Kinase / PTK2 (R32191)

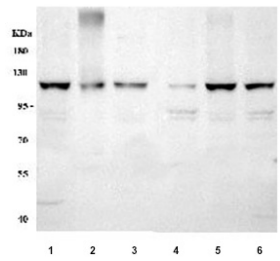
Catalog No.	Formulation	Size
R32191	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

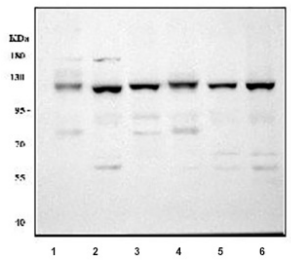
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q05397
Localization	Cell junctions, cytoplasm, nucleus
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This FAK antibody is available for research use only.



IHC staining of FFPE human breast cancer tissue with FAK antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) HeLa, 2) PC-3, 3) K562, 4) A431, 5) A549 and 6) HepG2 cell lysate with FAK antibody. FAK has numerous isoforms and is routinely observed in western blot between 80~125 kDa.



Western blot testing of 1) rat brain, 2) rat C6, 3) mouse lung, 4) mouse brain, 5) mouse RAW264.7 and 6) mouse NIH 3T3 cell lysate with FAK antibody. FAK has numerous isoforms and is routinely observed in western blot between 80~125 kDa.

Description

FAK (Focal Adhesion Kinase) is a cytoplasmic non-receptor tyrosine kinase that plays a central role in integrin-mediated signal transduction. It is activated at focal adhesion sites, where cells attach to the extracellular matrix, and functions as a key regulator of cell adhesion, migration, survival, and proliferation. Because of its involvement in diverse cellular processes, a FAK antibody is widely used in research focused on cell signaling, cancer progression, and tissue remodeling.

Upon integrin engagement or stimulation by growth factors, FAK undergoes autophosphorylation at tyrosine 397, creating a docking site for Src-family kinases and other signaling molecules. This interaction initiates downstream pathways such as MAPK, PI3K-AKT, and Rho GTPase signaling, which together coordinate cytoskeletal reorganization and cell motility. Employing a FAK antibody enables researchers to track activation states and protein localization in studies of mechanotransduction and adhesion dynamics.

FAK has been extensively studied in cancer biology due to its role in tumor cell invasion, angiogenesis, and metastasis. Overexpression or hyperactivation of FAK is frequently observed in solid tumors, making it an attractive target for therapeutic intervention. Beyond oncology, FAK is also important in wound healing, cardiovascular disease, and stem cell biology. Using a FAK antibody provides valuable insight into these areas by allowing precise detection of FAK expression and activity.

NSJ Bioreagents offers a high-quality FAK antibody validated for applications including western blot, immunohistochemistry, and immunofluorescence. Choosing a FAK antibody from NSJ Bioreagents ensures accuracy and reproducibility in studies of adhesion signaling, cytoskeletal regulation, and disease pathways.

Application Notes

Optimal dilution of the FAK antibody should be determined by the researcher.

Immunogen

Amino acids AHALAVDAKNLLDVIDQARLKMLGQTRPH of human PTK2/FAK were used as the immunogen for the FAK antibody.

Storage

After reconstitution, the FAK antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.