

## FAK (PT0245R) PT® Rabbit mAb

Catalog No: YM8154

**Reactivity:** Human; Mouse; Rat;

**Applications:** WB;IHC;IF;IP;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:

Mouse Gene Id: 14083

**Mouse Swiss Prot** 

No:

P34152

Q05397

Rat Gene ld: 25614

Rat Swiss Prot No: 035346

**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA



**Source:** Monoclonal, rabbit, IgG, Kappa

**Dilution:** IHC 1:400-1:1000,WB 1:1000-1:5000,IF 1:200-1:1000,ELISA

1:5000-1:20000, IP 1:50-1:200,

**Purification:** Protein A

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 119kD

Observed Band: 119kD

**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 proteintyrosine 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 : Cytoplasm

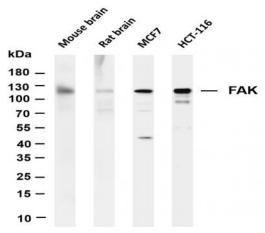
**Expression:** 

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

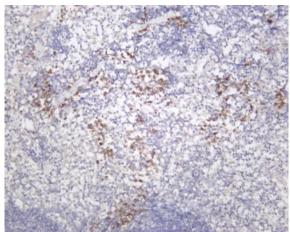
level) (PubMed:31630787).



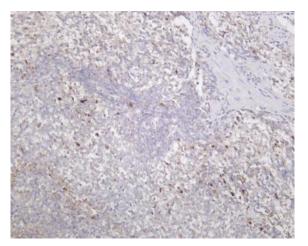
## **Products Images**



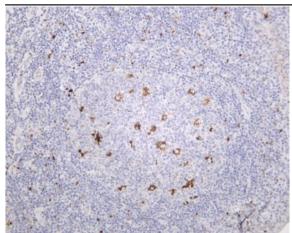
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-FAK (PT0245R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Mosue brain Lane 2: Rat brain Lane 3: MCF7 Lane 4: HCT-116 Predicted band size: 119kDa Observed band size: 119kDa



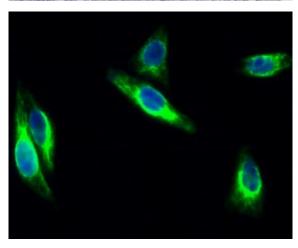
Mouse spleen was stained with Anti-FAK (PT0245R) rabbit antibody



Rat spleen was stained with Anti-FAK (PT0245R) rabbit antibody



Human tonsil was stained with Anti-FAK (PT0245R) rabbit antibody



Immunofluorescence analysis of Hela cell. 1,FAK 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.