



# FAK mouse mAb

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-14232                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Reactivity</b>                  | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Applications</b>                | WB;IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Gene Name</b>                   | ptk2                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen</b>                   | Purified recombinant human FAK protein fragments expressed in E.coli.                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>                 | This antibody detects endogenous levels of FAK and does not cross-react with related proteins.                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>                      | Monoclonal, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purification</b>                | The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                    |
| <b>Dilution</b>                    | wb 1:1000 icc 1:200. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Synonyms</b>                    | PTK2;2C5B9;EC:2.7.10.2;FADK 1;FAK1;FAK;FADK;FAK 1;FAK related non kinase polypeptide;FAK1_HUMAN;Focal adhesion kinase 1;Focal adhesion Kinase;Focal adhesion kinase isoform FAK Del33;Focal adhesion kinase related nonkinase;FRNK;p125FAK;pp125FAK;PPP1R71;Protein phosphatase 1 regulatory subunit 71;Protein tyrosine kinase 2;Protein Tyrosine Kinase Cytoplasmic;Protein-tyrosine kinase 2;PTK 2;PTK2 protein tyrosine kinase 2; PTK2 protein tyrosine kinase 2. |
| <b>Observed Band</b>               | 125kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated Molecular Weight</b> | 125kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Cell Pathway</b>                | 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.                                                                                                                                    |
| <b>Tissue Specificity</b>          | 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 activation

## 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],

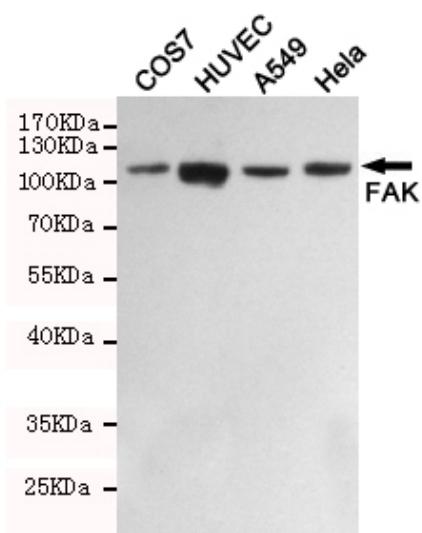
## matters needing attention

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 detection of FAK in COS7, HUVEC, A549 and HeLa cell lysates using FAK mouse mAb (1:1000 diluted). Predicted band size: 125kDa. Observed band size: 125kDa.

Immunofluorescent analysis of HeLa cells fixed by anhydrous methanol at -20°C and using FAK mouse mAb (dilution 1:200).