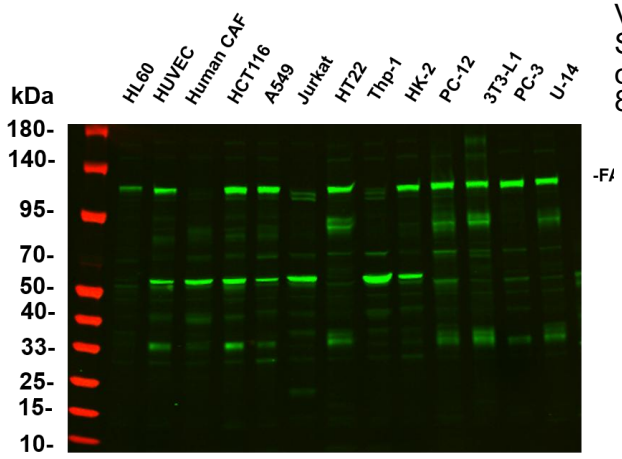
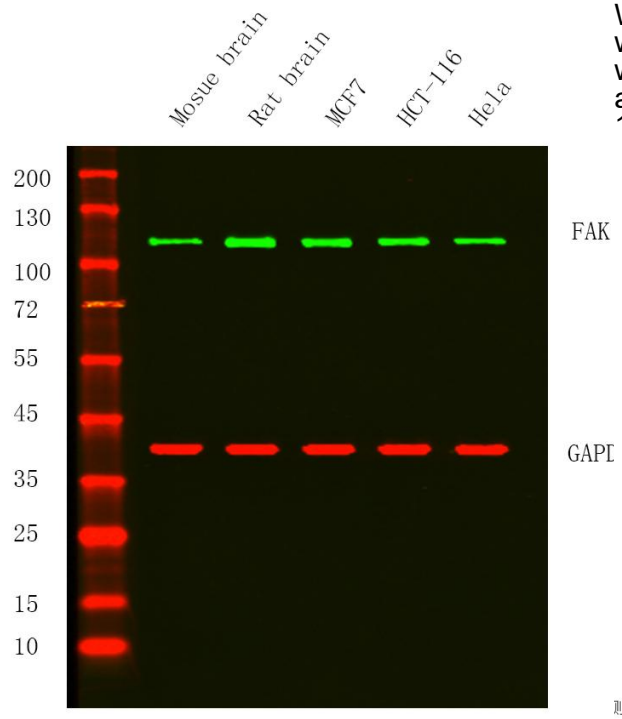
FAK Rabbit mAb

Catalog No	YP-rAb-18031
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	PTK2
Protein Name	Focal adhesion kinase 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:400-1:1000; WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
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	119kD
Calculated Molecular Weight	119kD
Cell Pathway	Cytoplasm
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

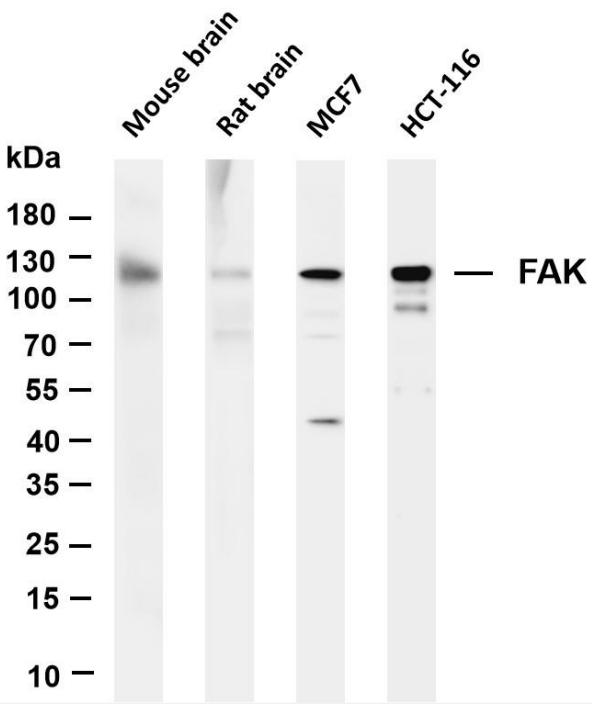
	oncogenic transformations resulting in increased kinase activity.,PTM:Phosphorylated on 6 tyrosine residues upon activation.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily.,similarity:Contains 1 FERM domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Constituent of focal adhesions.,subunit:Interacts with CAS family members and with GIT1, SORBS1 and BCAR3. Interacts with RGNEF and SHB (By similarity). Interacts with TGFB1I1.,tissue specificity:Expressed in all organs tested, in lymphoid cell lines, but most abundantly in brain.,
Background	protein tyrosine kinase 2 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.



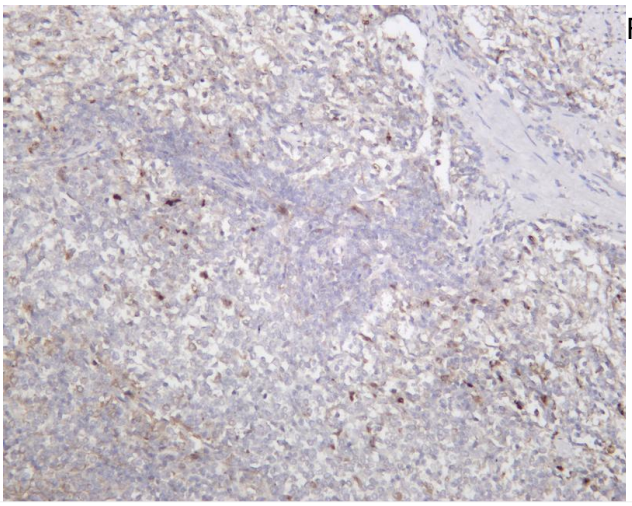
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4℃, over night with a 1:2500 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody



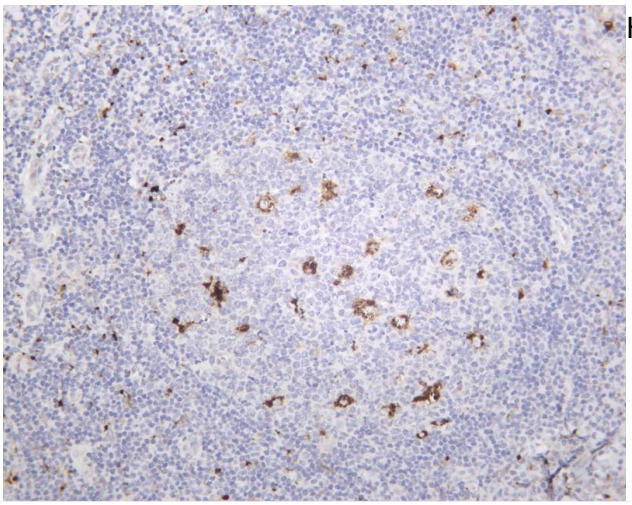
Western Blot analysis using Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-FAK Rabbit mAb-YM8154 diluted at 1:2000. Loading contrl: Mouse anti GAPDH(YM3029 1:2000) Secondary : Dylight 800, Goat Anti Rabbit IgG(



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-FAK 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



Rat spleen was stained with Anti-FAK rabbit antibody



Human tonsil was stained with Anti-FAK rabbit antibody