



**Category:** Monoclonal Antibodies  
**Product Name:** Mouse Monoclonal Antibody to FAK

**Catalog Number:** MAB-606020431

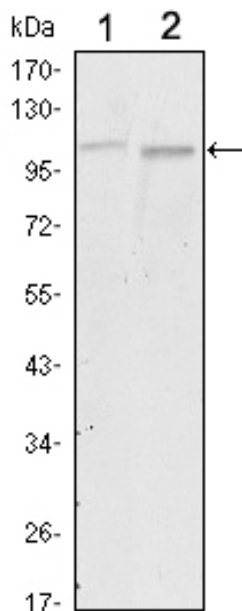


Figure 1: Western blot analysis using FAK mouse mAb against A549 (1) and NIH/3T3 (2) cell lysate.

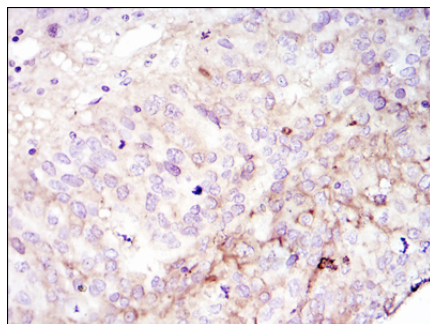


Figure 2: Immunohistochemical analysis of paraffin-embedded cervix tumor using FAK mouse mAb with DAB staining

Lot#:  
Clone#: 10H7  
Host and isotype: Mouse IgG1  
Size: 0.1ml  
MW: 119kDa  
Aliases: FAK; FADK; FAK1; FRNK; pp125FAK; PTK2  
Entrez Gene: 5747  
Species reactivity: Human; Mouse

**Description** 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. At least four transcript variants encoding four different isoforms have been found for this gene, but the full-length nature of only two of them have been determined. Tissue specificity: Expressed in all organs tested, in lymphoid cell lines, but most abundantly in brain. RD: Focal adhesion kinase 1 (FAK) is a ubiquitously expressed non-receptor protein tyrosine kinase that is concentrated in the focal adhesions that form between cells growing in the presence of extracellular matrix constituents. This cellular localization is directed by a <sup>1</sup>Focal Adhesion Targeting<sup>1</sup> (FAT) sequence, a 125 amino acid sequence at the C-terminus. FAK plays an important role in migration, cell spreading, differentiation, cytoskeleton protein phosphorylation, apoptosis and acceleration of the G1 to S phase transition of the cell cycle. It associates with several different signaling proteins such as Src-family PTKs, p130Cas, Shc, Grb2, PI 3-kinase, and paxillin. This enables FAK to function within a network of integrin-stimulated signaling pathways leading to the activation of targets such as the ERK and JNK/mitogen-activated protein kinase pathways. FAK is also linked to oncogenes at biochemical and functional levels. Increased expression and/or activity of FAK in various tumors has been correlated with enhanced migration and invasiveness of human tumor cells in addition to promoting increased cell proliferation.

**Immunogen** Purified recombinant fragment of human FAK expressed in E. Coli.

**Application** Western Blotting: 1/500 - 1/2000.

Immunohistochemistry: 1/200 - 1/1000.

Immunofluorescence: 1/200 - 1/1000.

ELISA: Proposed dilution 1/10000.

Not yet tested in other applications.

Determining optimal working dilutions by titration test.

**Formulation** Aqueous fluid containing 0.03% sodium azide.

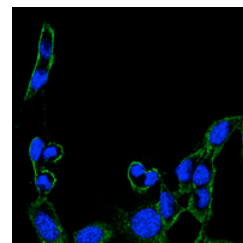
**Storage** Store at 4°C, for long term storage, store at -20°C.

**Related product**

**References** 1. Madeleine Toutant, Jeanne-Marie Studler, et al. Mol. Cell. Biol., Nov 2002; 22: 7731 - 7743.

2. Danshan Huang, Anthony T. Cheung, et al. J. Biol. Chem., May 2002; 277: 18151 - 18160.

Figure 3: Immunofluorescence analysis of B16 cells using FAK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



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