

Category: Monoclonal Antibodies Catalog Number: MAB-606030052

Product Name: Mouse Monoclonal Antibody to FAK

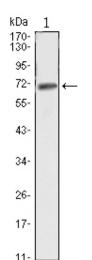


Figure 1: Western blot analysis using FAK mAb against FAK-hIgGFc transfected HEK293 cell lysate.

Lot#:

Clone#: 10H7A6

Host and isotype: Mouse IgG1

Size: 0.1ml MW: 119kDa

Aliases: FAK; FADK; FAK1; FRNK; pp125FAK; PTK2

Entrez Gene: 5747

Species reactivity: Human

**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 natures 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 i°Focal Adhesion Targetingi± (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/mitogenactivated 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 Bloting: 1/500 - 1/2000.

ELISA: Propose dilution 1/10000.

Not yet tested in other applications.

Determining optimal working dilutions by titration test. **Formulation** Ascitic fluid containing 0.03% sodium azide.

Storage Store at 4iæ, for long term storage, store at -20iæ.

## Related product

**References** 1. J Biol Chem. 2009 Aug 21;284(34):22865-77. 2. Biochem Biophys Res Commun. 2009 Oct 16;388(2):301-5.