

Product datasheet for **AM06453SU-N**

FAK (PTK2) Mouse Monoclonal Antibody [Clone ID: 10H7E9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	10H7E9
Applications:	ELISA, FC, IF, WB
Recommended Dilution:	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human FAK expressed in E. Coli.
Specificity:	This antibody reacts to FAK.
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% sodium azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	119 kDa
Gene Name:	protein tyrosine kinase 2
Database Link:	Entrez Gene 5747 Human Q05397



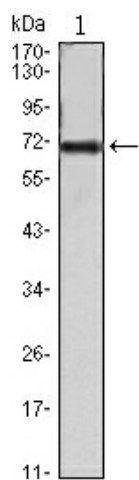
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Background:

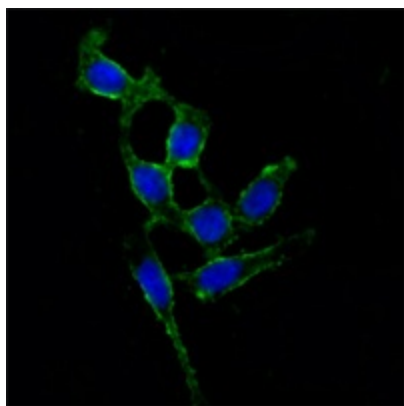
This gene encodes a cytoplasmic protein tyrosine kinase which is found concentrated in the focal adhesions that form between cells growing in the presence of extracellular matrix constituents. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence 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 "Focal Adhesion Targeting" (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.

Synonyms:

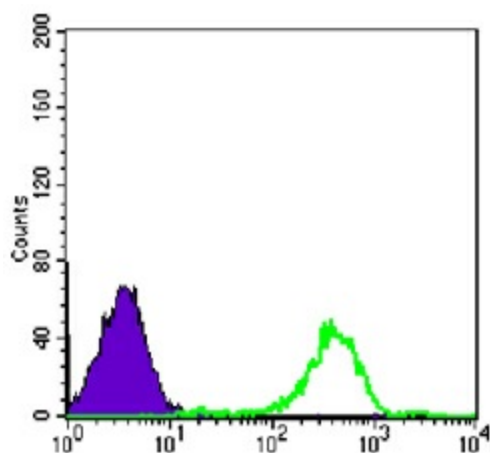
FAK, Focal adhesion kinase 1, FADK1, pp125FAK, Protein-tyrosine kinase 2

Product images:


Western blot analysis using FAK mAb against FAK (AA: 354-533)-hlgGfC transfected HEK293 cell lysate.



Immunofluorescence analysis of A549 cells using FAK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of Raji cells using FAK mouse mAb (green) and negative control (purple).