Datasheet for ABIN969130

anti-FAK antibody

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Overview

Quantity:	100 µL
Target:	FAK (PTK2)
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunocytochemistry (ICC)

Product Details

Immunogen:	Purified recombinant fragment of human FAK expressed in E. coli.
Clone:	10H7
Isotype:	IgG1
Purification:	purified

Target Details

Target:	FAK (PTK2)
Alternative Name:	FAK (PTK2 Products)
Background:	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

Target Details

	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. Aliases: FAK, FADK, FAK1, FRNK, pp125FAK, PTK2
Molecular Weight:	119 kDa
Gene ID:	5747
HGNC:	5747
Pathways:	Response to Growth Hormone Stimulus, CXCR4-mediated Signaling Events, Smooth Muscle Cell Migration, Signaling of Hepatocyte Growth Factor Receptor, VEGF Signaling

Application Details

Application Notes:	ELISA: 1:10000, WB: 1:500 - 1:2000, IHC: 1:200 - 1:1000, ICC: 1:200 - 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Ascitic fluid containing 0.03 % sodium azide.
Preservative:	Sodium azide

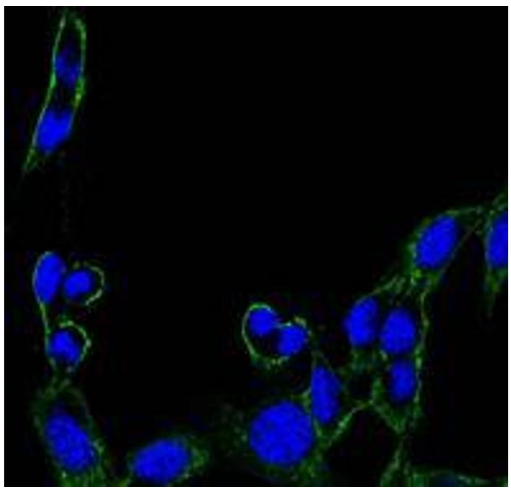
Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	4°C, -20°C for long term storage

Publications

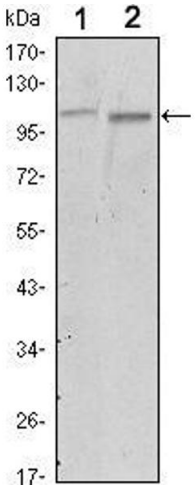
Product cited in:	Toka, Dunaway, Smaltz, Szulc-Dąbrowska, Drnevich, Mielcarska, Bossowska-Nowicka, Schweizer: "Bacterial and viral pathogen-associated molecular patterns induce divergent early transcriptomic landscapes in a bovine macrophage cell line." in: **BMC genomics**, Vol. 20, Issue 1, pp. 15, (2019) (PubMed). Murakami, Maeda, Yonezawa, Matsuki: "CC chemokine ligand 2 and CXC chemokine ligand 8 as neutrophil chemoattractant factors in canine idiopathic polyarthritis." in: **Veterinary immunology and immunopathology**, Vol. 182, pp. 52-58, (2016) (PubMed).

Images



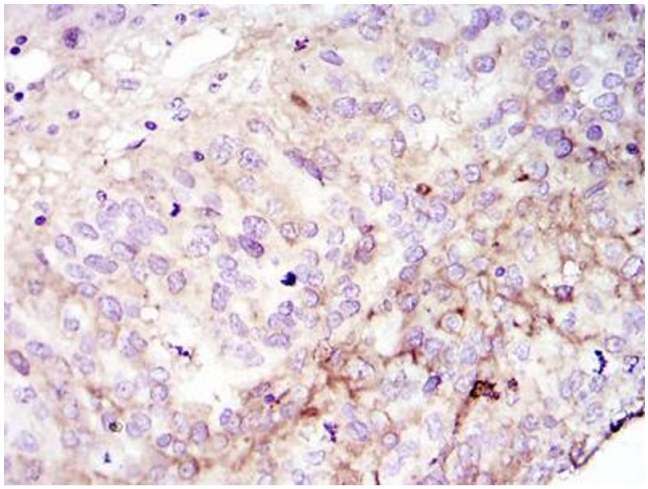
Immunofluorescence

Image 1. Immunofluorescence analysis of B16 cells using FAK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



Western Blotting

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



Immunohistochemistry

Image 3. Immunohistochemical analysis of paraffin-embedded cervices tumour using FAK mouse mAb with DAB staining

