Datasheet for ABIN1882052

anti-FAK antibody (N-Term)

1 Image | 3 Publications

Go to Product page

Overview

Quantity:	400 µL
Target:	FAK (PTK2)
Binding Specificity:	AA 1-128, N-Term
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This FAK antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This PTK2 antibody is generated from a mice immunized with a recombinant protein between 1-128 amino acids from the N-terminal region of human PTK2.
Clone:	1297CT261-163-145
Isotype:	IgG1
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	FAK (PTK2)
Alternative Name:	PTK2 (PTK2 Products)
Background:	Non-receptor protein-tyrosine kinase that plays an essential role in regulating cell migration,

Target Details

	adhesion, spreading, reorganization of the actin cytoskeleton, formation and disassembly of focal adhesions and cell protrusions, cell cycle progression, cell proliferation and apoptosis. Required for early embryonic development and placenta development. Required for embryonic angiogenesis, normal cardiomyocyte migration and proliferation, and normal heart development. Regulates axon growth and neuronal cell migration, axon branching and synapse formation, required for normal development of the nervous system. Plays a role in osteogenesis and differentiation of osteoblasts. Functions in integrin signal transduction, but also in signaling downstream of numerous growth factor receptors, G-protein coupled receptors (GPCR), EPHA2, netrin receptors and LDL receptors. Forms multisubunit signaling complexes with SRC and SRC family members upon activation, this leads to the phosphorylation of additional tyrosine residues, creating binding sites for scaffold proteins, effectors and substrates. Regulates numerous signaling pathways. Promotes activation of phosphatidylinositol 3-kinase and the AKT1 signaling cascade. Promotes activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling cascade. Promotes localized and transient activation of guanine nucleotide exchange factors (GEFs) and GTPase-activating proteins (GAPs), and thereby modulates the activity of Rho family GTPases. Signaling via CAS family members mediates activation of RAC1. Recruits the ubiquitin ligase MDM2 to P53/TP53 in the nucleus, and thereby regulates P53/TP53 activity, P53/TP53 ubiquitination and proteasomal degradation. Phosphorylates SRC, this increases SRC kinase activity. Phosphorylates ACTN1, ARHGEF7, GRB7, RET and WASL. Promotes phosphorylation of PXN and STAT1, most likely PXN and STAT1 are phosphorylated by a SRC family kinase that is recruited to autophosphorylated PTK2/FAK1, rather than by PTK2/FAK1 itself. Promotes phosphorylation of BCAR1, GIT2 and SHC1, this requires both SRC and PTK2/FAK1. Promotes phosphorylation of BMX and PIK3R1. Isoform 6 (FRNK) does not contain a kinase domain and inhibits PTK2/FAK1 phosphorylation and signaling. Its enhanced expression can attenuate the nuclear accumulation of LPXN and limit its ability to enhance serum response factor (SRF)-dependent gene transcription.
Molecular Weight:	119233
UniProt:	Q05397
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:	WB: 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
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
Expiry Date:	6 months

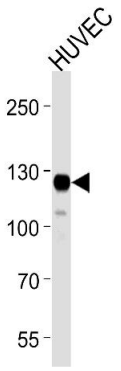
Publications

Product cited in:

Nusbaum, Mikkelsen, Zody, Asakawa, Taudien, Garber, Kodira, Schueler, Shimizu, Whittaker, Chang, Cuomo, Dewar, FitzGerald, Yang, Allen, Anderson, Asakawa, Blechschmidt, Bloom, Borowsky, Butler, Cook et al.: "DNA sequence and analysis of human chromosome 8. ..." in: **Nature**, Vol. 439, Issue 7074, pp. 331-5, (2006) (PubMed).

Whitney, Chan, Blake, Cosand, Neubauer, Aruffo, Kanner: "Human T and B lymphocytes express a structurally conserved focal adhesion kinase, pp125FAK." in: **DNA and cell biology**, Vol. 12, Issue 9, pp. 823-30, (1993) (PubMed).

André, Becker-André: "Expression of an N-terminally truncated form of human focal adhesion kinase in brain." in: **Biochemical and biophysical research communications**, Vol. 190, Issue 1, pp. 140-7, (1993) (PubMed).



Western Blotting

Image 1. Western blot analysis of lysate from HUVEC cell line,using PTK2 Antibody (N-term) (ABIN1882052 and ABIN2843641). (ABIN1882052 and ABIN2843641) was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody.Lysate at 35 µg per lane.