

FAK (Ab-843) Antibody

Catalog No: #33214

Package Size: #33214-1 50ul #33214-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

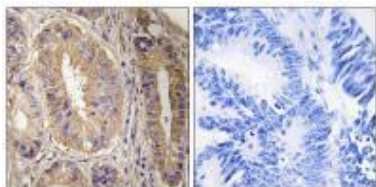
Product Name	FAK (Ab-843) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total FAK protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from Internal of human FAK.
Conjugates	Unconjugated
Target Name	FAK
Other Names	EC 2.7.10.2; FADK 1; FAK1; Focal adhesion kinase 1; pp125FAK
Accession No.	Swiss-Prot: Q05397NCBI Gene ID: 5747
SDS-PAGE MW	120kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

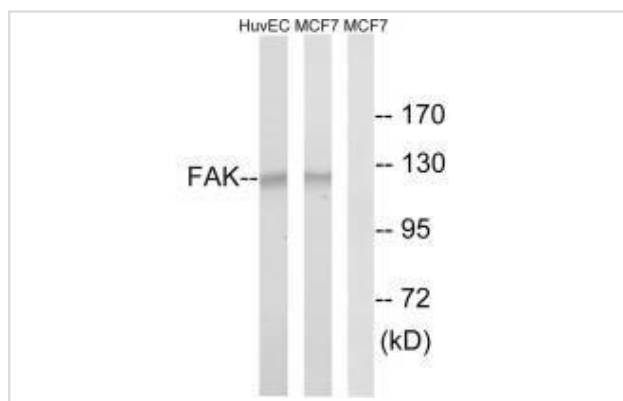
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

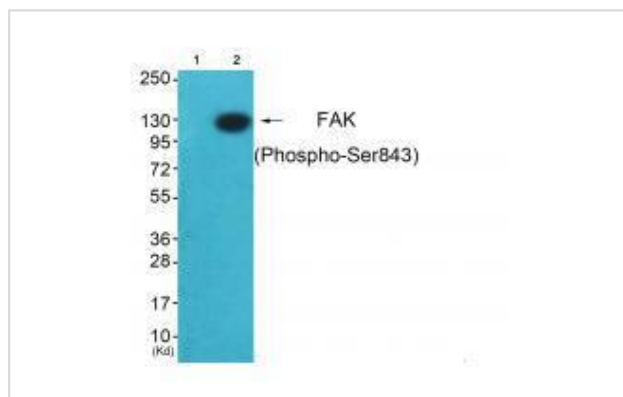
Images



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using FAK (Ab-843) antibody #33214.



Western blot analysis of extracts from HUVEC cells and MCF-7 cells, using FAK (Ab-843) antibody #33214.



Western blot analysis of extracts from HeLa cells (Lane 2), using FAK (Ab-843) antibody #33214. The lane on the left is treated with synthesized peptide.

Background

Non-receptor protein-tyrosine kinase that plays an essential role in regulating cell migration, 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. Whitney G.S., DNA Cell Biol. 12:823-830(1993).

Andre E., Biochem. Biophys. Res. Commun. 190:140-147(1993).

Lee S.-T., Oncogene 8:3403-3410(1993).

Published Papers

Byun Youngro;Hwang Hae Hyun;Jeong Hee Jeong;Kim Sung Wan;Lee Dong Yun;Okano Teruo;Yun Sangwu et al., Anticancer Effect of Heparin-Taurocholate Conjugate on Orthotopically Induced Exocrine and Endocrine Pancreatic Cancer, , (2021)

PMID:34830928

Note: This product is for in vitro research use only and is not intended for use in humans or animals.