


Product datasheet

Anti-FAK (phospho Y576) antibody ab226847

4 Images

Overview

Product name	Anti-FAK (phospho Y576) antibody
Description	Rabbit polyclonal to FAK (phospho Y576)
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Chicken, Xenopus laevis 
Immunogen	Synthetic peptide within Human FAK (internal sequence) (phospho Y576). The exact sequence is proprietary. Carrier-protein conjugated. Database link: Q05397
Positive control	WB: HEK-293T, HepG2 and HeLa whole cell extracts. ICC/IF: SK-N-SH cells. IP: HepG2 whole cell extract.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab226847 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 119 kDa.
ICC/IF		1/100 - 1/1000.

Target

Function

Non-receptor protein-tyrosine kinase implicated in signaling pathways involved in cell motility, proliferation and apoptosis. Activated by tyrosine-phosphorylation in response to either integrin clustering induced by cell adhesion or antibody cross-linking, or via G-protein coupled receptor (GPCR) occupancy by ligands such as bombesin or lysophosphatidic acid, or via LDL receptor occupancy. Microtubule-induced dephosphorylation at Tyr-397 is crucial for the induction of focal adhesion disassembly. Plays a potential role in oncogenic transformations resulting in increased kinase activity.

Tissue specificity

Expressed in all organs tested, in lymphoid cell lines, but most abundantly in brain.

Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily.
Contains 1 FERM domain.
Contains 1 protein kinase domain.

Domain

The first Pro-rich domain interacts with the SH3 domain of CRK-associated substrate (BCAR1) and CASL.
The carboxy-terminal region is the site of focal adhesion targeting (FAT) sequence which mediates the localization of FAK1 to focal adhesions.

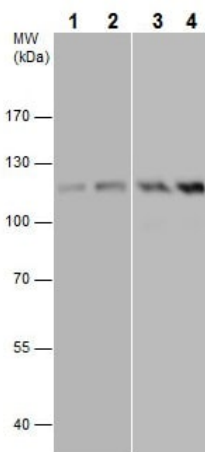
Post-translational modifications

Phosphorylated on 6 tyrosine residues upon activation. Microtubule-induced dephosphorylation at Tyr-397 could be catalyzed by PTPN11 and regulated by ZFYVE21. Dephosphorylated by PTPN11 upon EPHA2 activation by its ligand EFNA1.

Cellular localization

Cell junction > focal adhesion. Cell membrane. Constituent of focal adhesions.

Images



Western blot - Anti-FAK (phospho Y576) antibody (ab226847)

All lanes : Anti-FAK (phospho Y576) antibody (ab226847) at 1/3000 dilution

Lane 1 : Untreated HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract

Lane 2 : EGF-treated (50 ng/ml for 30 min) HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract

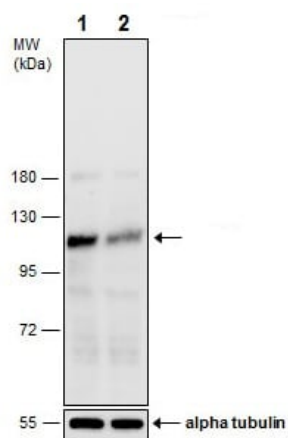
Lane 3 : Untreated HepG2 (human liver hepatocellular carcinoma cell line) whole cell extract

Lane 4 : EGF-treated (200 ng/ml for 30 min) HepG2 (human liver hepatocellular carcinoma cell line) whole cell extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 119 kDa

7.5% SDS-PAGE gel.



Western blot - Anti-FAK (phospho Y576) antibody (ab226847)

All lanes : Anti-FAK (phospho Y576) antibody (ab226847) at 1/500 dilution

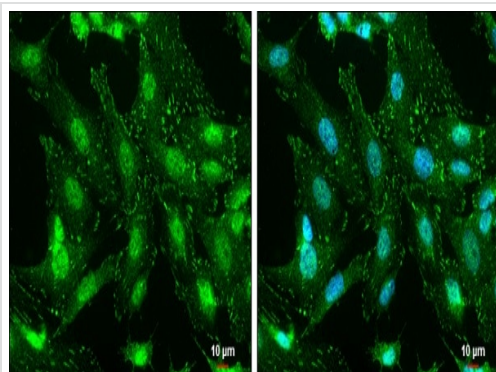
Lane 1 : Non-transfected HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell extract

Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) transfected with FAK shRNA whole cell extract

Lysates/proteins at 50 µg per lane.

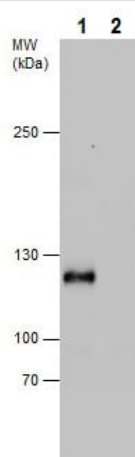
Predicted band size: 119 kDa

7.5% SDS-PAGE gel.



Immunocytochemistry/ Immunofluorescence - Anti-FAK (phospho Y576) antibody (ab226847)

4% paraformaldehyde-fixed SK-N-SH (human neuroblastoma cell line) cells labeling FAK (phospho Y576) (green) using ab226847 at 1/500 dilution in ICC/IF. Nuclear Counterstain: Hoechst 33342.



Western blot - Anti-FAK (phospho Y576) antibody (ab226847)

All lanes : Anti-FAK (phospho Y576) antibody (ab226847) at 1/1000 dilution

Lane 1 : Untreated HepG2 (human liver hepatocellular carcinoma cell line) whole cell extract

Lane 2 : HepG2 (human liver hepatocellular carcinoma cell line) treated with CIP (Calf-intestinal alkaline phosphatase), whole cell extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 119 kDa

5% SDS-PAGE gel.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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