abcam

Product datasheet

Anti-FAK (phospho Y861) antibody ab4804

★★★★★ 2 Abreviews 4 References 3 图像

概述

产品名称	Anti-FAK (phospho Y861)**抗体**
描述	**兔多克隆抗体**to FAK (phospho Y861)
宿主	Rabbit
经测试应用	**适用于:** WB, ICC
种属反应性	**与反应:** Chicken, Human **预测可用于:** Rat, Xenopus laevis
免疫原	Synthetic peptide corresponding to Human FAK (phospho Y861). The sequence is conserved in mouse, rat, chicken and frog.

常规说明

Focal Adhesion Kinase is a 125 kDa non-receptor protein tyrosine kinase that is a substrate for Src and a key element in growth factor and integrin signalling. Focal Adhesion Kinase plays a central role in cell spreading, differentiation, migration, cell death and acceleration of the G1 to S phase transition of the cell cycle. Tyr861 of Focal Adhesion Kinase is a major Src phosphorylation site that allows Focal Adhesion Kinase to bind to integrins and is also involved in cancer.

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.

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

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.3 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA

	BSA is IgG and protease free
纯度	Immunogen affinity purified
纯化说明	Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using (i) a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated Focal Adhesion Kinase protein, and (ii) a generic tyrosine phosphorylated peptide to remove antibody that is reactive with phosphotyrosine (irrespective of the sequence). The final product is generated by affinity chromatography using a Focal Adhesion Kinase-derived peptide that is phosphorylated at tyrosine 861.
Primary antibody说明	Focal Adhesion Kinase is a 125 kDa non-receptor protein tyrosine kinase that is a substrate for Src and a key element in growth factor and integrin signalling. Focal Adhesion Kinase plays a central role in cell spreading, differentiation, migration, cell death and acceleration of the G1 to S phase transition of the cell cycle. Tyr861 of Focal Adhesion Kinase is a major Src phosphorylation site that allows Focal Adhesion Kinase to bind to integrins and is also involved in cancer.
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab4804于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (2)	1/1000. Predicted molecular weight: 119 kDa.
ICC		1/250.

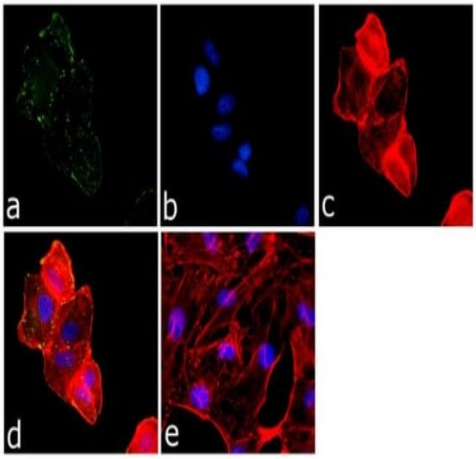
靶标

功能	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.
组织特异性	Expressed in all organs tested, in lymphoid cell lines, but most abundantly in brain.
序列相似性	Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily. Contains 1 FERM domain. Contains 1 protein kinase domain.
结构域	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.
翻译后修饰	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.

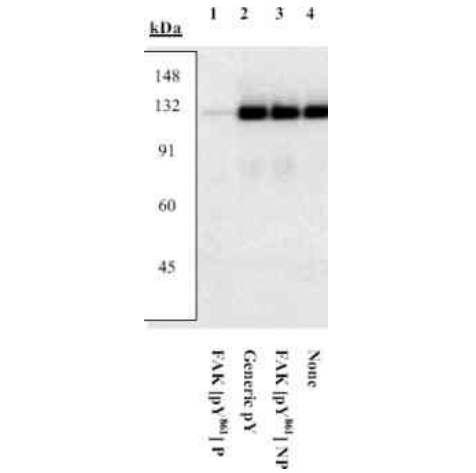
细胞定位 Cell junction > focal adhesion. Cell membrane. Constituent of focal adhesions.

图片



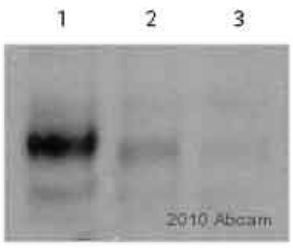
Immunocytochemistry - Anti-FAK (phospho Y861) antibody (ab4804)

Immunofluorescence analysis of FAK [pY861] was done on 70% confluent log phase A-549 cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labelled with ab4804 at 1:250 dilution in 1% BSA and incubated for 3 hours at room temperature and then labelled with a Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with DAPI. F-actin (Panel c: red) was stained with Rhodamine Phalloidin at a 1:300 dilution. Panel d is a merged image showing localization of target protein at focal adhesions. Panel e is a no primary antibody control. The images were captured at 60X magnification.



Western blot - Anti-FAK (phospho Y861) antibody (ab4804)

Peptide Competition: Cell extracts prepared from chick embryo fibroblasts expressing FAK and plated on fibronectin were resolved by SDS-PAGE on a 10% Tris-glycine gel. The proteins then were transferred to nitrocellulose and incubated with 0.50 µg/mL ab4804 antibody, following prior incubation with: (1) the phosphopeptide immunogen, (2) a generic phosphotyrosine containing peptide, (3) the non-phosphorylated peptide corresponding to the phosphopeptide, and (4) no peptide. After washing, membranes were incubated with goat F(ab')2 anti-rabbit IgG alkaline phosphatase and bands were detected using the Tropix WesternStar detection method. The data show that only the phosphopeptide corresponding to this site blocks the antibody signal, demonstrating the specificity of the ab4804 antibody for this phosphorylated residue. Peptide Competition: Cell extracts prepared from chick embryo fibroblasts expressing FAK and plated on fibronectin were resolved by SDS-PAGE on a 10% T



Western blot - Anti-FAK (phospho Y861) antibody (ab4804)

Image courtesy of an anonymous Abreview.

All lanes : Anti-FAK (phospho Y861) antibody (ab4804) at 1/1000 dilution

Lane 1 : Whole cell lysate prepared from human MDA-MB-231 breast cancer cells, un-treated
Lane 2 : Whole cell lysate prepared from human MDA-MB-231 breast cancer cells, treated for 1hr with 2.5uM AZD0530 src inhibitor
Lane 3 : Whole cell lysate prepared from human MDA-MB-231 breast cancer cells, treated for 1hr with 5uM AZD0530 src inhibitor

Lysates/proteins at 25 µg per lane.

Secondary
All lanes : Goat anti-rabbit HRP conjugated at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 119 kDa
Observed band size: 125 kDa

Exposure time: 5 minutes

Primary antibody incubated for 16 hours at 4°C.
Blocking step was performed using 5% milk for 1 hour at 25°C.

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