abcam

Product datasheet

Anti-FAK (phospho S732) antibody ab4792

★★★★★ 4 Abreviews 17 References 画像数 3

製品の概要

製品名	Anti-FAK (phospho S732) antibody
製品の詳細	Rabbit polyclonal to FAK (phospho S732)
由来種	Rabbit
アプリケーション	**適用あり:** WB
種交差性	**交差種:** Mouse, Human **交差が予測される動物種:** Chicken, Xenopus laevis
免疫原	Synthetic peptide corresponding to Human FAK (phospho S732).
特記事項	Focal Adhesion Kinase is a 125 kDa non-receptor protein tyrosine kinase that plays a key role in signalling by growth factors, extracellular matrix and stress signals. Indeed, 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. Cyclin-dependent kinase-5 (Cdk5), a serine/threonine kinase and an important regulator in brain development, has been found to be essential for phosphorylation at serine 732. In the context of the Focal Adhesion Kinase-Related Non-Kinase (FRNK), the c-terminal non-kinase domain of Focal Adhesion Kinase that acts as a dominant negative inhibitor of Focal Adhesion Kinase signalling, other serine kinases appear to readily phosphorylate this same site. The functional significance of phosphorylation on serine 732 is yet to be determined. 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

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

バッファー	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 2.5% Glycerol, 0.1% BSA BSA is IgG and protease free
精製度	Immunogen affinity purified
特記事項（精製）	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 enzyme and (ii) a generic serine phosphorylated peptide to remove antibody that is reactive with phosphoserine, irrespective of the sequence. The final product is generated by affinity chromatography using a Focal Adhesion Kinase-derived peptide that is phosphorylated at serine 732.
一次抗体 備考	Focal Adhesion Kinase is a 125 kDa non-receptor protein tyrosine kinase that plays a key role in signalling by growth factors, extracellular matrix and stress signals. Indeed, 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. Cyclin-dependent kinase-5 (Cdk5), a serine/threonine kinase and an important regulator in brain development, has been found to be essential for phosphorylation at serine 732. In the context of the Focal Adhesion Kinase-Related Non-Kinase (FRNK), the c-terminal non-kinase domain of Focal Adhesion Kinase that acts as a dominant negative inhibitor of Focal Adhesion Kinase signalling, other serine kinases appear to readily phosphorylate this same site. The functional significance of phosphorylation on serine 732 is yet to be determined.
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab4792の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

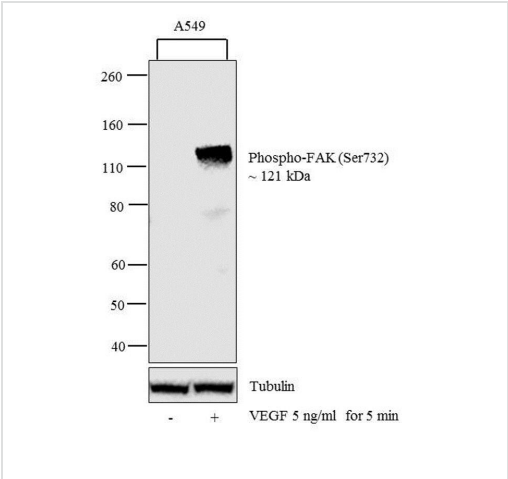
アプリケーション	Abreviews	特記事項
WB		Use a concentration of 0.1 - 0.5 µg/ml. Predicted molecular weight: 125 kDa.

ターゲット情報

機能	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.
組織特異性	Expressed in all organs tested, in lymphoid cell lines, but most abundantly in brain.
配列類似性	Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily.

	Contains 1 FERM domain. Contains 1 protein kinase domain.
ドメイン	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.
翻訳後修飾	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.
細胞内局在	Cell junction > focal adhesion. Cell membrane. Constituent of focal adhesions.

画像

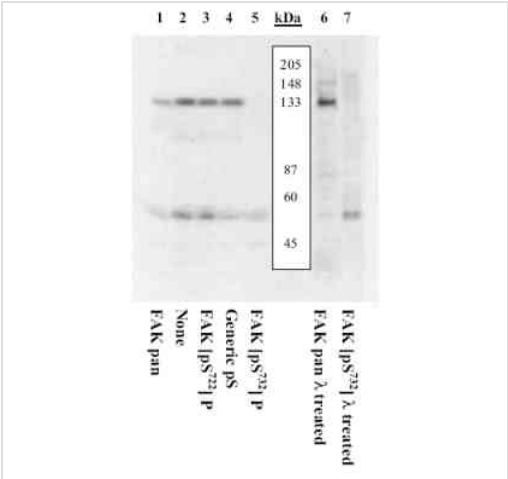


Western blot - Anti-FAK (phospho S732) antibody (ab4792)

All lanes : Anti-Metabotropic Glutamate Receptor 6/MGLUR6 antibody (**ab10314**)

Lane 1 : A549 without VEGF treatment.
Lane 2 : A549 with 5 ng/ml VEGF treatment for 5 mins.

Predicted band size: 125 kDa



Western blot - Anti-FAK (phospho S732) antibody (ab4792)

Peptide Competition: Extracts prepared from cdk5 +/- mouse brain lysates were resolved by SDS-PAGE on a 10% Tris-glycine gel and transferred to nitrocellulose. Membranes were blocked with a 5% BSA-TBST buffer overnight at 4^{O}C, then were incubated with FAK pan antibody (1), or 0.34 µg/mL ab4792 antibody for two hours at room temperature in a 3% BSA TBST buffer, following prior incubation with: no peptide (2), the phosphopeptide corresponding to ab4792 (3), a generic phosphoserine containing peptide (4), or, the phosphopeptide immunogen (5). After washing, membranes were incubated with goat F(ab')2 anti-rabbit IgG alkaline phosphatase and signals were detected using the Tropix WesternStar method.

Phosphatase Stripping: Extracts prepared from cdk5 +/- mouse brain lysates were resolved by SDS-PAGE on a 10% Tris-glycine gel and transferred to PVDF. The membrane was treated with lambda phosphatase, then incubated with either FAK pan antibody

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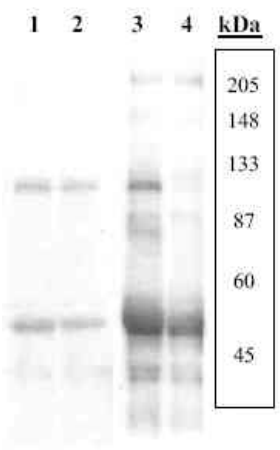

Western blot - Anti-FAK (phospho S732) antibody (ab4792)

Influence of cdk5: Extracts prepared from cdk5 +/- (1, 3) and cdk5 -/- (2, 4) mouse brain lysates were resolved by SDS-PAGE on a 10% Tris-glycine gel and transferred to PVDF. The membrane was incubated with either FAK pan antibody (1, 2), or with 0.34 µg/mL ab4792 antibody (3, 4). After washing, membranes were incubated with goat F(ab')2 anti-rabbit IgG alkaline phosphatase and signals were detected using the Tropix WesternStar method. The data show that cdk5 is essential for phosphorylation of FAK at serine 732. Other kinases appear to phosphorylate FRNK on this site.
Influence of cdk5: Extracts prepared from cdk5 +/- (1, 3) and cdk5 -/- (2, 4) mouse brain lysates were resolved by SDS-PAGE on a 10% Tris-glycine gel and transferred to PVDF. The membrane was incubated with either FAK pan antibody (1, 2), or with 0.34 µg/mL ab4792 antibody (3, 4). After washing, membranes were incubated with goat F(ab')2 anti-rabbit IgG alkaline phosphatase and signals were de