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Product datasheet

Anti-FAK (phospho S910) antibody ab4794

1 References 画像数 1

製品の概要

製品名 Anti-FAK (phospho S910) antibody

製品の詳細 Rabbit polyclonal to FAK (phospho S910)

由来種 Rabbit

アプリケーション 適用あり: WB

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat, Chicken, Xenopus laevis 🔷

免疫原 Synthetic peptide corresponding to FAK (phospho S910). The sequence is conserved in human,

mouse, rat, chicken and frog.

特記事項

FAK is a non-receptor protein tyrosine kinase discovered as a substrate for Src and it is a key protein in integrin, growth factor and bioactive peptide signaling. FAK plays a central role in cell spreading, differentiation, migration, cell death and acceleration of the G1 to S phase transition of the cell cycle. FAK regulation includes phosphorylation at multiple tyrosine and serine residues. Phosphorylation of tyrosine generally is associated with positive regulation and growth promotion, however, dephosphorylation at these sites occurs as cells enter mitosis (M-Phase of the cell cycle). In contrast, serine phosphorylation either remains high or is increased as cells enter mitosis and may play a role in focal adhesion disassembly.

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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. Avoid freeze / thaw cycles.

バッファー pH: 7.30

Preservative: 0.05% Sodium azide

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Constituents: PBS, 50% Glycerol, 0.1% BSA

PBS is without Mg2+ and Ca2+ and BSA is lgG 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 phospho-serine, irrespective of the sequence. The final product is generated by affinity chromatography using a Focal Adhesion Kinase-derived peptide that is phosphorylated at serine 910.

一次抗体 備考

FAK is a non-receptor protein tyrosine kinase discovered as a substrate for Src and it is a key protein in integrin, growth factor and bioactive peptide signaling. FAK plays a central role in cell spreading, differentiation, migration, cell death and acceleration of the G1 to S phase transition of the cell cycle. FAK regulation includes phosphorylation at multiple tyrosine and serine residues. Phosphorylation of tyrosine generally is associated with positive regulation and growth promotion, however, dephosphorylation at these sites occurs as cells enter mitosis (M-Phase of the cell cycle). In contrast, serine phosphorylation either remains high or is increased as cells enter mitosis and may play a role in focal adhesion disassembly.

ポリ/モノ

ポリクローナル

アイソタイプ

lgG

アプリケーション

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アプリケーション	Abreviews	特記事項
WB		1/1000. 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.

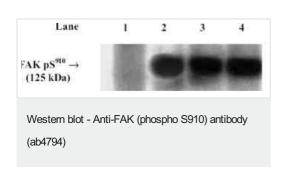
翻訳後修飾

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



Specificity for detecting FAK pS910 phosphorylation using a phospho-specific antibody (PSSA): Cell extracts prepared from mitotic human epithelial carcinoma cells expressing FAK were resolved by SDS-PAGE on a 10% Tris-glycine gel, and transferred to nitrocellulose. Membranes were incubated with 0.5 µg/mL ab4794, following prior incubation in the presence of the peptide immunogen (lane 1), a generic phosphoserine peptide (lane 2), the non-phosphopeptide corresponding to the FAK phosphopeptide (lane 3), or the absence of the peptide immunogen (lane 4). After washing, membranes were incubated with goat F(ab')2 anti-rabbit lgG alkaline phosphatase and bands were detected using the Tropix WesternStar detection method. The data show that only the phosphopeptide corresponding to the peptide immunogen blocks the antibody signal, thereby demonstrating the specificity of the ab4794 PSSA for the targeted phosphorylation site. Specificity for detecting FAK pS910 phosphorylatio

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