

# Anti-FAK (phospho Y407) antibody ab4814

## 1 图像

### 概述

<b>产品名称</b>	Anti-FAK (phospho Y407)抗体
<b>描述</b>	兔多克隆抗体to FAK (phospho Y407)
<b>宿主</b>	Rabbit
<b>特异性</b>	Phosphorylation site-specific antibody selective for the phosphorylated form of the Focal Adhesion Kinase enzyme containing a phosphate on tyrosine 407. The antibody has been shown to recognize Focal Adhesion Kinase (approximately 125 kDa) in chick embryo fibroblast cells plated on fibronectin.
<b>经测试应用</b>	<b>适用于:</b> WB
<b>种属反应性</b>	<b>与反应:</b> Chicken
<b>免疫原</b>	Synthetic peptide corresponding to FAK (phospho Y407). The sequence is conserved in mouse, rat and chicken.

### 常规说明

Focal Adhesion Kinase is a non-receptor protein tyrosine kinase discovered as a substrate for Src and as a key element of 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. The activity of the phosphorylation site pTyr407 is currently unknown.

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.

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### 性能

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

<b>纯度</b>	Immunogen affinity purified
<b>纯化说明</b>	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 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 407.
<b>Primary antibody说明</b>	Focal Adhesion Kinase is a non-receptor protein tyrosine kinase discovered as a substrate for Src and as a key element of 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. The activity of the phosphorylation site pTyr407 is currently unknown.
<b>克隆</b>	多克隆
<b>同种型</b>	IgG

## 应用

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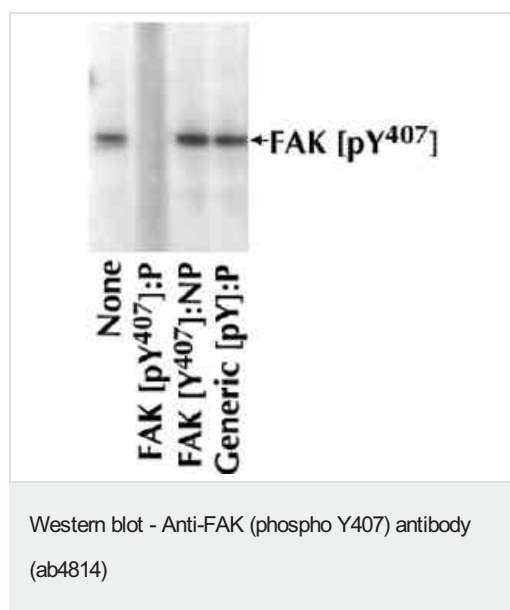
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000. Predicted molecular weight: 125 kDa.

## 靶标

<b>功能</b>	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.
<b>组织特异性</b>	Expressed in all organs tested, in lymphoid cell lines, but most abundantly in brain.
<b>序列相似性</b>	Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily. Contains 1 FERM domain. Contains 1 protein kinase domain.
<b>结构域</b>	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.
<b>翻译后修饰</b>	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.
<b>细胞定位</b>	Cell junction > focal adhesion. Cell membrane. Constituent of focal adhesions.

## 图片



Cell extracts prepared from chick embryo fibroblasts expressing FAK and plated on fibronectin were resolved by SDS-PAGE on a 4-20% Tris-glycine gel. The proteins were then transferred to nitrocellulose. Membranes were incubated with 0.3  $\mu\text{g}/\text{mL}$  ab4814, following prior incubation in the absence (none) or presence of the peptide immunogen, the non-phosphopeptide corresponding to the FAK phosphopeptide, or a generic phosphotyrosine peptide. After washing, membranes were incubated with goat F(ab')<sub>2</sub> 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, therefore demonstrating the specificity of ab4814 for this phosphorylated residue. Cell extracts prepared from chick embryo fibroblasts expressing FAK and plated on fibronectin were resolved by SDS-PAGE on a 4-20% Tris-glycine gel. The proteins were then transferred to

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

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