

Product datasheet

Active human FAK peptide ab42618

1 Image

Overview

Product name Active human FAK peptide

Description

Nature Synthetic

Amino Acid Sequence

Species Human

Specifications

Our [Abpromise guarantee](#) covers the use of **ab42618** in the following tested applications.

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

Biological activity Specific Activity : 100 U/mg. One unit defined as the amount of enzyme that will transfer 1nmol phosphate to Tyr substrate per minute at pH 7.4 and 30deg.C. Assay buffer : 50mM HEPES pH 7.4, 3mM MgCl₂, 3mM MnCl₂, 1mM DTT, 3um Na-orthovanadate, 0.1M ATP, 30ug/ml Poly (Glu:Tyr) 4:1 substrate and 1ug/ml recombinant FAK.

Applications Inhibition Assay

Form Liquid

Additional notes Source : Baculovirus infected Sf9 cells

Preparation and Storage

Stability and Storage Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
 pH: 8.00
 Constituents: 0.0462% DTT, 0.395% Tris HCl, 0.05% Tween, 50% Glycerol, 0.58% Sodium chloride
 This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

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.

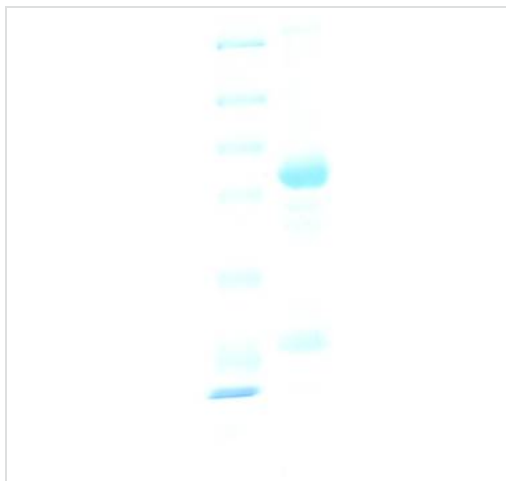
Post-translational modifications

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



10 ug protein loaded. Protein ladder bands above and below where protein runs are 62kDa and 47kDa, respectively.

SDS-PAGE - Active human FAK peptide (ab42618)

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