

Datasheet for ABIN7127482

**Recombinant anti-FAK antibody**[Go to Product page](#)**1** Image

## Overview

|                |                                    |
|----------------|------------------------------------|
| Quantity:      | 100 µL                             |
| Target:        | FAK (PTK2)                         |
| Reactivity:    | Human                              |
| Host:          | Rabbit                             |
| Antibody Type: | Recombinant Antibody               |
| Clonality:     | Monoclonal                         |
| Conjugate:     | This FAK antibody is un-conjugated |
| Application:   | ELISA, Immunohistochemistry (IHC)  |

## Product Details

|                   |                                              |
|-------------------|----------------------------------------------|
| Immunogen:        | A synthesized peptide derived from human FAK |
| Clone:            | 3B2                                          |
| Isotype:          | IgG                                          |
| Cross-Reactivity: | Human                                        |
| Purification:     | Affinity-chromatography                      |

## Target Details

|                   |                                                                                                  |
|-------------------|--------------------------------------------------------------------------------------------------|
| Target:           | FAK (PTK2)                                                                                       |
| Alternative Name: | PTK2 ( <a href="#">PTK2 Products</a> )                                                           |
| Background:       | Background: Non-receptor protein-tyrosine kinase that plays an essential role in regulating cell |

migration, adhesion, spreading, reorganization of the actin cytoskeleton, formation and disassembly of focal adhesions and cell protrusions, cell cycle progression, cell proliferation and apoptosis. Required for early embryonic development and placenta development. Required for embryonic angiogenesis, normal cardiomyocyte migration and proliferation, and normal heart development. Regulates axon growth and neuronal cell migration, axon branching and synapse formation, required for normal development of the nervous system. Plays a role in osteogenesis and differentiation of osteoblasts. Functions in integrin signal transduction, but also in signaling downstream of numerous growth factor receptors, G-protein coupled receptors (GPCR), EPHA2, netrin receptors and LDL receptors. Forms multisubunit signaling complexes with SRC and SRC family members upon activation, this leads to the phosphorylation of additional tyrosine residues, creating binding sites for scaffold proteins, effectors and substrates. Regulates numerous signaling pathways. Promotes activation of phosphatidylinositol 3-kinase and the AKT1 signaling cascade. Promotes activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling cascade. Promotes localized and transient activation of guanine nucleotide exchange factors (GEFs) and GTPase-activating proteins (GAPs), and thereby modulates the activity of Rho family GTPases. Signaling via CAS family members mediates activation of RAC1. Recruits the ubiquitin ligase MDM2 to P53/TP53 in the nucleus, and thereby regulates P53/TP53 activity, P53/TP53 ubiquitination and proteasomal degradation. Phosphorylates SRC, this increases SRC kinase activity. Phosphorylates ACTN1, ARHGEF7, GRB7, RET and WASL. Promotes phosphorylation of PXN and STAT1, most likely PXN and STAT1 are phosphorylated by a SRC family kinase that is recruited to autophosphorylated PTK2/FAK1, rather than by PTK2/FAK1 itself. Promotes phosphorylation of BCAR1, GIT2 and SHC1, this requires both SRC and PTK2/FAK1. Promotes phosphorylation of BMX and PIK3R1. Isoform 6 (FRNK) does not contain a kinase domain and inhibits PTK2/FAK1 phosphorylation and signaling. Its enhanced expression can attenuate the nuclear accumulation of LPXN and limit its ability to enhance serum response factor (SRF)-dependent gene transcription.

Aliases: Focal adhesion kinase 1 (FADK 1) (EC 2.7.10.2) (Focal adhesion kinase-related nonkinase) (FRNK) (Protein phosphatase 1 regulatory subunit 71) (PPP1R71) (Protein-tyrosine kinase 2) (p125FAK) (pp125FAK), PTK2, FAK FAK1

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|           |                                                                                                                                                                                                                                                        |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UniProt:  | <a href="#">Q05397</a>                                                                                                                                                                                                                                 |
| Pathways: | <a href="#">Response to Growth Hormone Stimulus</a> , <a href="#">CXCR4-mediated Signaling Events</a> , <a href="#">Smooth Muscle Cell Migration</a> , <a href="#">Signaling of Hepatocyte Growth Factor Receptor</a> , <a href="#">VEGF Signaling</a> |

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## Application Details

Application Notes: Recommended dilution: IHC:1:50-1:200,

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

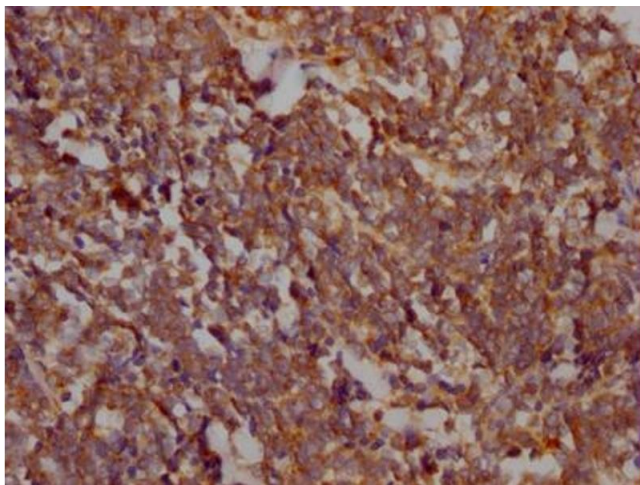
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C,-80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



### Immunohistochemistry

**Image 1.** IHC image of ABIN7127482 diluted at 1:100 and staining in paraffin-embedded human lung cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.