

p-FAK (Tyr 925): sc-11766

BACKGROUND

Activation of integrins in the extracellular matrix (ECM) of eukaryotic cells promotes the formation of membrane adhesion complexes, known as focal adhesions, which can include cytoskeletal proteins and protein tyrosine kinases, such as focal adhesion kinase (FAK). Phosphorylation events occurring within focal adhesions influence numerous processes that include mitogenic signaling, cell survival and cell motility. FAK is a non-receptor tyrosine kinase that is ubiquitously expressed and highly conserved between species. FAK is recruited by integrin clusters and variably phosphorylated depending on the effector molecules present in the focal adhesion. Phosphorylation of FAK Tyr 397 decreases during serum starvation, contact inhibition and cell cycle arrest, all conditions under which activating FAK Tyr 407 phosphorylation increases.

CHROMOSOMAL LOCATION

Genetic locus: PTK2 (human) mapping to 8q24.3; Ptk2 (mouse) mapping to 15 D3.

SOURCE

p-FAK (Tyr 925) is available as either goat (sc-11766) or rabbit (sc-11766-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing Tyr 925 phosphorylated of FAK of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11766 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-FAK (Tyr 925) is recommended for detection of Tyr 925 phosphorylated FAK of mouse, rat, human, *Xenopus laevis* and zebrafish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p-FAK (Tyr 925) is also recommended for detection of correspondingly phosphorylated FAK in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for FAK siRNA (h): sc-29310, FAK siRNA (m): sc-35353, FAK shRNA Plasmid (h): sc-29310-SH, FAK shRNA Plasmid (m): sc-35353-SH, FAK shRNA (h) Lentiviral Particles: sc-29310-V and FAK shRNA (m) Lentiviral Particles: sc-35353-V.

Molecular Weight of p-FAK: 125 kDa.

Positive Controls: NIH/3T3 + anisomycin cell lysate: sc-2247, Hep G2 cell lysate: sc-2227 or FAK (h): 293T Lysate: sc-114600.

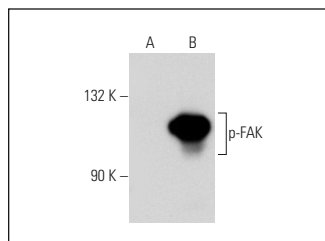
RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



p-FAK (Tyr 925): sc-11766. Western blot analysis of FAK phosphorylation in non-transfected: sc-117752 (A) and human FAK transfected: sc-114600 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

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4. Rice, K.M., et al. 2007. Load-induced focal adhesion mechanotransduction is altered with aging in the Fischer 344/NNiaHSd x brown Norway/BiNia rat aorta. *Biogerontology* 8: 257-267.
5. Morales, S.A., et al. 2009. Functional consequences of interactions between FAK and epithelial membrane protein 2 (EMP2). *Invest. Ophthalmol. Vis. Sci.* 50: 4949-4956.
6. Park, S.Y., et al. 2010. Electrospun silk fibroin scaffolds with macropores for bone regeneration: an *in vitro* and *in vivo* study. *Tissue Eng. Part A* 16: 1271-1279.
7. Ohkawa, Y., et al. 2010. Ganglioside GD3 enhances adhesion signals and augments malignant properties of melanoma cells by recruiting integrins to glycolipid-enriched microdomains. *J. Biol. Chem.* 285: 27213-27223.
8. Jiang, W.G., et al. 2012. Inhibitory effects of Yangzheng Xiaoji on angiogenesis and the role of the focal adhesion kinase pathway. *Int. J. Oncol.* 41: 1635-1642.
9. Jiang, W.G., et al. 2013. Antitumour effects of Yangzheng Xiaoji in human osteosarcoma: the pivotal role of focal adhesion kinase signalling. *Oncol. Rep.* 30: 1405-1413.
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