invitrogen

Rabbit (polyclonal) Anti-Human FAK Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number:	AHO0502
Lot Number:	See product label
Quantity/Volume:	0.5 mg/0.5 mL
Form of Antibody:	Purified rabbit immunoglobulins in phosphate buffered saline, pH 7.3, with 0.2% bovine serum albumin.
Preservation:	0.1% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	Purified by Protein A affinity chromatography.
Immunogen:	Recombinant protein corresponding to amino acid residues 853-1052 from the C-terminal region of human FAK.
Specificity:	This antibody recognizes a protein of M_r =125 kDa, identified as focal adhesion kinase (FAK). FAK is a widely expressed non-receptor protein tyrosine kinase discovered as a substrate for Src and as a key element of integrin signaling. Regulation of FAK includes phosphorylation at multiple tyrosine and serine residues. Increased FAK tyrosine phosphorylation occurs upon integrin engagement with fibronectin. Phosphorylation of tyrosine generally is associated with positive regulation and growth promotion; however, dephosphorylation at these sites occurs as cells begin to enter the M-phase of the cell cycle. In contrast, serine phosphorylation either remains high or is increased as cells enter mitosis. 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 binds multiple signaling proteins including p130Cas, Graf, Grb2, Src family SH2 domains, and the p85 subunit of PI3-kinase.
Species Reactivity:	Human, mouse, and rat. Other species were not tested.
Applications:	This antibody is suitable for use in immunofluorescence, immunoprecipitation, and Western blotting.
Suggested Working Dilutions:	For immunoprecipitation, the recommended concentration is 10 μ g/mg of protein lysate; and for Western blot analysis, the recommended concentration is 5 - 10 μ g/mL with an incubation for 2 hours at room temperature. The optimal antibody concentration should be determined for each specific application.
Recommended Positive Control:	MCF-7 (human) cells, L-929 (mouse) cells, or PC-12 (rat) cells.
Storage:	Store at 2-8°C. For long term storage, apportion into working aliquots and store at -20° C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

This product is for research use only. Not for use in diagnostic procedures.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PIAHO0502 (Rev 10/08)

(Page 1 of 2) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, <u>www.invitrogen.com</u>). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

References: Akiyama, S.K. (1996) Integrins in cell adhesion and signaling. Hum. Cell 9(3):181-186.

Cance, W.G. and E.T. Liu (1995) Protein kinases in human breast cancer. Breast Cancer Res. Treat. 35(1):105-114.

Hanks, S.K. and T.R. Polte (1997) Signaling through focal adhesion kinase. BioEssays 19(2):137-145.

Ilic, D., C.H. Damsky, and T. Yamamoto (1997) Focal adhesion kinase: at the crossroads of signal transduction. J. Cell Sci. 110:401-407.

Martin, G.M. (1996) Fak and focal adhesions. Jpn. J. Cancer Res. 87(3):1.

Morimoto, C. and K. Tachibana (1996) Beta 1 integrin-mediated signaling in human T-cells. Hum. Cell 9(3):163-168.

Neet, K. and T. Hunter (1996) Vertebrate non-receptor protein-tyrosine kinase families. Genes Cells 1(2):147-169.

Otey, C.A. (1996) pp125FAK in focal adhesion. Internat. Rev. Cytol. 167:161-183.

Owens, L.V., L. Xu, R.J. Craven, G.A. Dent, T.M. Weiner, L. Kornberg, E.T. Liu, and W.G. Cance (1995) Overexpression of the focal adhesion kinase (p125FAK) in invasive human tumors. Cancer Res. 55(13):2752-2755.

Schlaepfer, D.D. and T. Hunter (1996) Signal transduction from the extracellular matrix—a role for the focal adhesion protein-tyrosine kinase FAK. Cell Struct. Funct. 21(5):445-450.

This product is for research use only. Not for use in diagnostic procedures.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PIAHO0502 (Rev 10/08)

(Page 2 of 2) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, <u>www.invitrogen.com</u>). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.