

Mouse (monoclonal) Anti-FAK Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number: AHO1272

Lot Number: See product label

Quantity/Volume: 100 μg/0.2 mL

Clone Number: 34Q36

Isotype: $IgG_{2b}\kappa$ (mouse)

Form of Antibody: Purified immunoglobulin in phosphate buffered saline, pH 7.2, with 1% 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 from ascites by affinity chromatography.

Immunogen: Recombinant fragment of human FAK expressed in *E. coli*.

Specificity: This antibody recognizes a protein of Mr=125 kDa, identified as focal adhesion kinase (FAK).

FAK is a widely expressed non-receptor protein tyrosine kinase discovered as substrate for Src and as a key element of integrin signaling. Regulation of FAK include 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.

The epitope is localized in the C-terminal region (amino acid residues 853-1052).

Species Reactivity: Human, mouse and rat.

Applications: This antibody is suitable for use in Western blotting.

Suggested Working

Dilutions:

For Western blotting, the recommended concentration is 1 µg/mL. The optimal antibody

concentration should be determined for each specific application.

Recommended Positive Control:

Human HeLa cells, mouse L929 cells and rat PC12 cells.

Storage: Store at 2-8°C. For long term storage, aliquot into small volumes 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.

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References:

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Romanova, L., et al. (2004) Phosphorylation of paxillin tyrosines 31 and 118 controls polarization and motility of lymphoid cells and is PMA-sensitive. J. Cell Sci. 117:3759-3768.

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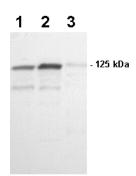
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Related Products:

FAK (Total) ELISA	Cat. #	KHO0431
FAK [pY397] phosphoELISA TM	Cat. #	KHO0441
FAK Rabbit Polyclonal Antibody	Cat. #	AHO0502
FAK (active) Recombinant Protein	Cat. #	PHO3144
FAK [pY397] Phosphospecific Rabbit Polyclonal Antibody	Cat. #	44-624G
FAK [pY397] Phosphospecific Rabbit Monoclonal Antibody	Cat. #	44-625G



Western Blot Analysis

Proteins from cell extracts of human HeLa cells (lane 1), mouse L929 cells (lane 2), and rat PC12 cells (lane 3) were resolved by SDS-PAGE and transferred to PVDF. The membranes were incubated with this FAK monoclonal antibody (clone 34Q36) at a concentration of 1 μg/mL for two hours at room temperature. After washing, the membranes were incubated with a goat F(ab')2 anti-mouse IgG alkaline phosphatase conjugated antibody (Cat. # AMI4405) at a 1:2000 dilution. Bands were detected with CDP-substrate using the WesternStarTM method (Tropix) and Kodak BioMax film.

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