FAK [pY576] ABfinity™ Recombinant Rabbit Monoclonal Antibody - Purified

REF Catalog no. 700013

(See product label for lot information)

Clone/PAD: 2H74L24
Isotype: IgG
Gene ID: 5747
Protein Acc. No.: Q05397
Qty: 100 µg
Volume: 200 µl
Concentration: 0.5 mg/ml

Formulation
PBS + 0.09% sodium azide

Immunogen
A peptide corresponding to amino acids 573-582 of Q05397.

Immunogen sequence
DST[pY]YKASKG

Reactivity
This antibody reacts with Human FAK [pY576]. Based on sequence similarity, reactivity to chimpanzee, rhesus monkey, macaque, mouse, rat, chicken, Xenopus and zebrafish is expected.

Specificity
This antibody is specific for pY576 and does not recognize non-phosphorylated FAK protein.

Storage
2-8°C for up to 1 mo, -20°C for long term storage. Avoid repeated freezing and thawing.

Expiration Date
Expires one year from date of receipt when stored as instructed.

Validated Applications:

	Species	Test Material	Concentration
Immunofluorescence	human	HeLa	0.05-0.1 µg/ml

Background
Focal Adhesion Kinase (FAK) is a 125 kDa non-receptor protein tyrosine kinase that acts as a substrate for Src and is a key element of integrin signaling (3,8-11). 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 (1,4). Regulation of FAK includes phosphorylation at multiple tyrosine and serine residues (7,2,5). Increased FAK tyrosine phosphorylation occurs upon integrin engagement with fibronectin (4). The phosphorylation by Src of tyrosines 576 and 577 in the activation loop results in maximal activity of FAK (6). However, the two sites appear to be differentially regulated by stimuli.

References

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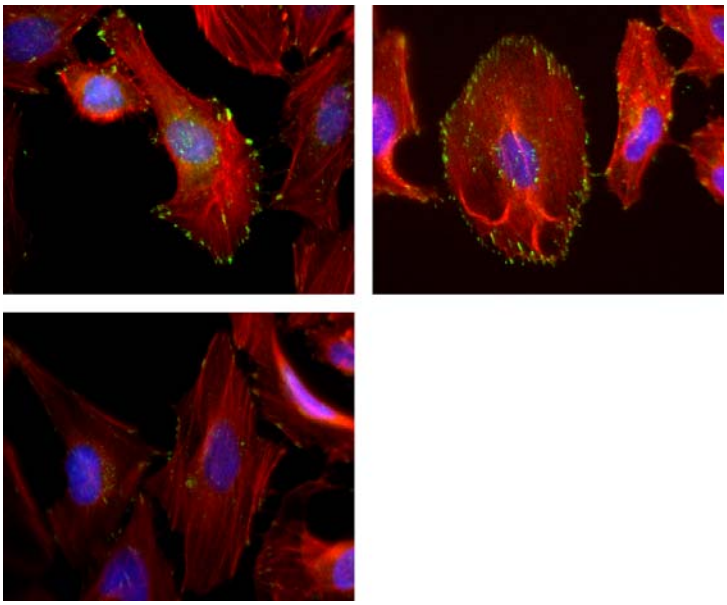

Immunocytochemistry of HeLa cells labeled with rabbit anti-FAK [pY576] (Cat. No. 700013).

HeLa cells were labeled with rabbit anti-FAK [pY576] (60 ng/ml, top left). Cells were pre-incubated with phosphopeptide used as an immunogen (bottom left) or with non-phosphopeptide (top right) demonstrating phosphospecificity. Alexa Fluor® 488 goat anti-rabbit (Cat. No. A11008) at 1:1000 was used as secondary antibody. Nucleus is stained with Hoescht (blue), AF488 signal (FAK [pY576], green), actin is stained with Phalloidin AF568 (red).