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Store at -20C
#3281

Phospho-FAK (Tyr576/577) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 125	Source/Isotype: Rabbit	UniProt ID: #Q05397	Entrez-Gene Id: 5747
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Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-FAK (Tyr576/577) Antibody detects endogenous levels of FAK only when phosphorylated at tyrosine 576/577. This antibody may cross-react with other activated receptor tyrosine kinases.

Species predicted to react based on 100% sequence homology

Chicken, Xenopus

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr576/577 of human FAK. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Focal adhesion kinase (FAK) is a widely expressed cytoplasmic protein tyrosine kinase involved in integrin-mediated signal transduction. It plays an important role in the control of several biological processes, including cell spreading, migration, and survival (1). Activation of FAK by integrin clustering leads to autophosphorylation at Tyr397, which is a binding site for the Src family kinases PI3K and PLCγ (2-5). Recruitment of Src family kinases results in the phosphorylation of Tyr407, Tyr576, and Tyr577 in the catalytic domain, and Tyr871 and Tyr925 in the carboxy-terminal region of FAK (6,7). Tyr576 and Tyr577 lie in the activation loop of the kinase domain, and mutation of these residues reduces FAK catalytic activity (6).

Background References

1. Parsons, J.T. et al. (2000) *Oncogene* 19, 5606-13.
2. Schaller, M.D. et al. (1994) *Mol Cell Biol* 14, 1680-8.
3. Cobb, B.S. et al. (1994) *Mol Cell Biol* 14, 147-55.
4. Chen, H.C. et al. (1996) *J Biol Chem* 271, 26329-34.
5. Zhang, X. et al. (1999) *Proc Natl Acad Sci U S A* 96, 9021-6.
6. Calalb, M.B. et al. (1995) *Mol Cell Biol* 15, 954-63.
7. Schlaepfer, D.D. et al. (1994) *Nature* 372, 786-791.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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