

Background

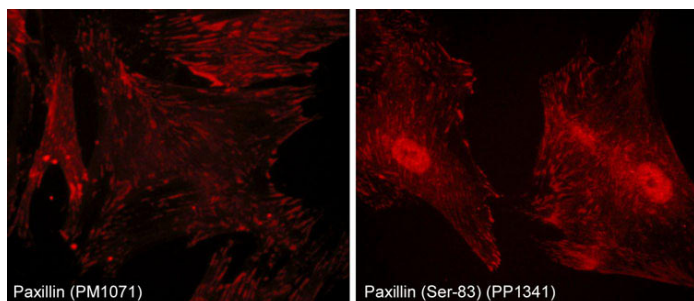
Paxillin, a focal adhesion protein, is involved in focal adhesion formation during cell adhesion and migration. Paxillin contains LD motifs, LIM domains, and SH3-/SH2-binding domains that participate in a variety of protein-protein interactions with kinases, GTPase-activating proteins, and cytoskeletal proteins. Phosphorylation of paxillin occurs at both tyrosine and serine sites. Serine phosphorylation of paxillin occurs in response to growth-factor activation and fibronectins. Both JNK1 and cdc2 kinases can phosphorylate serine 178 in paxillin. The mutant form of paxillin (S178A) decreases the migration of keratocytes and epithelial cells. Thus, phosphorylation paxillin at serine 178 may be important during cell migration.



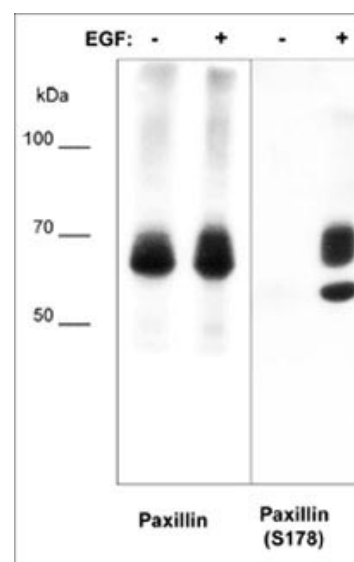
**Guaranteed
to
Outperform**

Background References

- Huang, C. et al. (2003) Nature 424:219-223.
Woodrow, M.A. (2003) Exp. Cell. Res. 287(2):325-338.
Huang, C. et al. (2004) Cell Cycle 3(1):4-6.



Immunocytochemical labeling of Ser-83 phosphorylated paxillin in rabbit spleen fibroblasts. The cells were labeled with mouse monoclonal Paxillin (left) and rabbit polyclonal Paxillin (Ser-83, right) antibodies, then detected using appropriate secondary antibodies conjugated to Cy3.



Western blot analysis of A431 cells (20 µg/lane) serum starved overnight and treated with EGF (100 ng/ml) for 5 min. The blot was probed with anti-Paxillin mouse monoclonal (PM1071) or anti-Paxillin (Ser-178) rabbit polyclonal (PP1051).

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Immunogen

Clone (M107) was generated from full-length recombinant human paxillin.

Uniprot ID: P49023

Product Citations

Dasgupta, SK et al. (2017) *Cancer Med.* 6(4):809.
WB: HMEC-1 cells

Stone, JD et al. (2016) *J Non Invasive Vasc Invest.* 1:2-9.
FC: rat ATr5 smooth muscle cells

Omori, K. et al. (2015) *Bioch Biophys Res Com* 458(4): 934.
IF: mouse NIH3T3 fibroblasts

Cheng, I. et al. (2014) *J Biol Chem.* 289(39):26989
IF: B16-F1 cells

Lee, S. et al. (2013) *Biochim Biophys Acta.* 1830(8):4017.
WB: rat C6 and human U373 gliomas

Buffer and Storage

Mouse monoclonal antibody purified with protein A chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

Applications

WB	1:1000
ELISA	1:2000
IP	1:100
ICC	1:100

Species Reactivity

Hu, Rt, Ms, Ck

Isotype: IgG1

End user should determine optimal dilution for their particular applications and experiments.
Western blot membranes were incubated with diluted antibody in 5% non-fat milk, Tris buffer, 0.04% Tween20 for 1 hour at room temperature.
Abbreviations: E = ELISA, ICC = immunocytochemistry, IHC = immunohistochemistry, IP = immunoprecipitation, MS = mass spectrometry, WB = western blot
Hu = Human, Ms = Mouse, Rt = Rat, Ck = Chicken, F = Frog, B = Bovine

Specificity

This antibody detects a 68kDa* protein corresponding to the molecular mass of paxillin on SDS-PAGE immunoblots of A431 cells. Similar results were seen in various cells and tissues from rat, mouse, and chicken origin.

*All molecular weights (MW) are confirmed by comparison to MW standards and to western blot mobilities of known proteins with similar MW.
"Native" western blot utilizes non-reducing sample buffer (no mercaptoethanol or SDS), normal SDS-PAGE gel electrophoresis, and no methanol in transfer buffers.

Related Products

- PM1021 Paxillin (Tyr-31), phospho-specific Mouse Monoclonal
- PP1051 Paxillin (Ser-178), phospho-specific Rabbit Polyclonal
- AL9201 A431 EGF Control Lysate
- AL9301 A431 + EGF (5 min) Lysate
- PK6620 Paxillin Phospho-Ser/Thr Regulation Antibody Sampler Kit



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