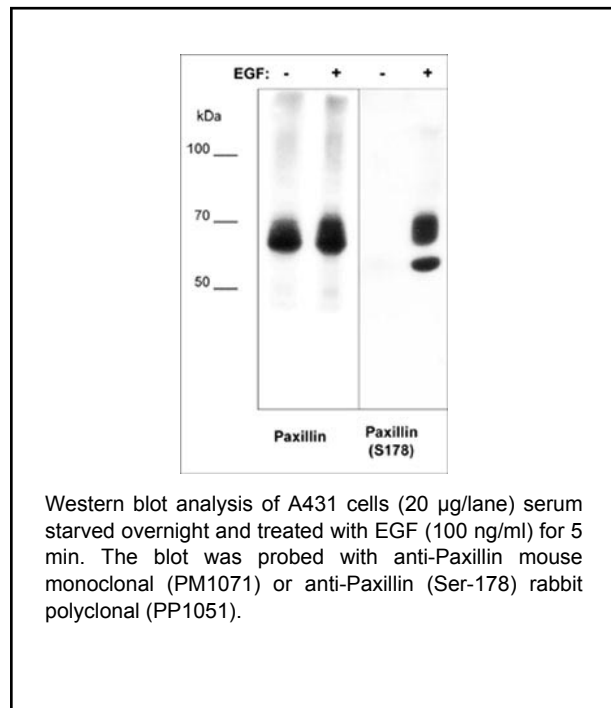


Background

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.

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.



Applications

WB 1:500
 ELISA 1:2000
 IHC 1:100

Species Reactivity

Hu, Rt, Ms

Specificity

This antibody detects a 68kDa* protein corresponding to the molecular mass of phosphorylated paxillin on SDS-PAGE immunoblots of EGF treated A431 cells, but not in A431 control cells. Similar results were seen in calyculin A treated human A431 and aortic endothelial cells.

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, PBS, 0.04% Tween20 for 1 hour at room temperature.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

Immunogen

Uniprot ID: P49023

Phospho-Paxillin (Ser-178) synthetic peptide (coupled to KLH) corresponding to amino acid residues around serine 178 of human paxillin. This human sequence is highly conserved in rat and mouse paxillin.

Buffer and Storage

Rabbit polyclonal, affinity-purified antibody 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.

Related Products

PM1071 Paxillin Mouse Monoclonal
 PM1021 Paxillin (Tyr-31), phospho-specific Mouse Monoclonal
 PK6070 Paxillin Phospho-Regulation Antibody Sampler Kit
 PX1055 phospho-Paxillin (Ser-178) Blocking Peptide

Product References

Chen, M.J. et al. (2020) Am J Can Res. 10(1):275.
 IHC, WB mutant S178A
 Wu, D. W. et al. (2014) Oncogene 33(35): 4385.
 WB: CCM3 cells
 Wei, W. et al. (2013) Pancreatology 13(4):384.
 WB: pancreatic PANC1, Capan-2 and HT1080 cells

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