# abcam

# Product datasheet

# Anti-Paxillin (phospho S126) antibody ab24402

## 1 References 4 Images

#### Overview

Product name Anti-Paxillin (phospho S126) antibody

**Description** Rabbit polyclonal to Paxillin (phospho S126)

Host species Rabbit

Tested applications Suitable for: IHC-P, ICC/IF, WB

**Species reactivity** Reacts with: Mouse, Human

Predicted to work with: Chicken

Immunogen Synthetic peptide corresponding to Human Paxillin (phospho S126).

Positive control WB: RAW 264.7 cells treated with LPS. A549. HepG2 IHC-P: human breast carcinoma ICC/IF:

NIH/3T3

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term.

Storage buffer pH: 7.30

Preservative: 0.05% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA

Purity Immunogen affinity purified

**Purification notes** Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has

been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated paxillin. The final product is generated by affinity chromatography using a paxillin-derived peptide that is

phosphorylated at serine 126.

1

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab24402 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/20. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/250.
WB		1/1000. Detects a band of approximately 68 kDa.

#### **Target**

Function Cytoskeletal protein involved in actin-membrane attachment at sites of cell adhesion to the

extracellular matrix (focal adhesion).

**Sequence similarities**Belongs to the paxillin family.

Contains 4 LIM zinc-binding domains.

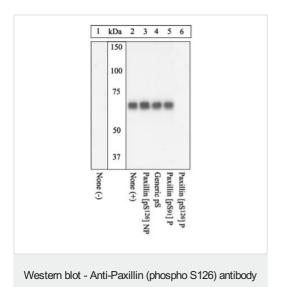
Post-translational modifications

Phosphorylated on tyrosine residues during integrin-mediated cell adhesion, embryonic development, fibroblast transformation and following stimulation of cells by mitogens.

**Cellular localization** Cytoplasm > cytoskeleton. Cell junction > focal adhesion.

#### **Images**

(ab24402)



**All lanes :** Anti-Paxillin (phospho S126) antibody (ab24402) at 1/1000 dilution

Lane 1: Lysate from untreated RAW 264.7 cells

**Lane 2 :** Lysate from RAW 264.7 cells treated with 1  $\mu$ g/mL LPS for 60 minutes

**Lane 3 :** Lysate from RAW 264.7 cells treated with 1  $\mu$ g/mL LPS for 60 minutes with non-phosphorylated peptide corresponding to the immunogen

**Lane 4 :** Lysate from RAW 264.7 cells treated with 1 μg/mL LPS for 60 minutes with generic phosphoserine-containing peptide

**Lane 5 :** Lysate from RAW 264.7 cells treated with 1  $\mu$ g/mL LPS for 60 minutes with phosphopeptide corresponding to Paxillin [pS<sup>91</sup>

Lane 6: Lysate from RAW 264.7 cells treated with 1 µg/mL LPS

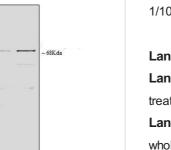
for 60 minutes with phosphopeptide immunogen

#### Secondary

**All lanes :** Goat F(ab)<sub>2</sub> anti-rabbit lgG HRP conjugate.

Observed band size: 68 kDa

Lysates were resolved on a 10% polyacrylamide gel and transferred to PVDF. The membrane was blocked with a 5% milk-TBST buffer for one hour at room temperature, and then incubated with the Paxillin [pS $^{126}$ ] antibody for two hours at room temperature in a 1% milk-TBST buffer, following its prior incubation with or without peptides. Following incubation with goat F(ab')<sub>2</sub> anti-rabbit lgG HRP conjugate and bands were detected using the Pierce SuperSignal method. The data show that only the phosphopeptide corresponding to Paxillin [pS 126] blocks the antibody signal, thereby demonstrating the specificity of the antibody. No competition was seen following incubation with paxillin phosphopeptides to S $^{130}$ , S $^{178}$ , S $^{380}$ , S $^{455}$ , or S $^{479}$  (not shown). The antibody was also shown to be specific using 293 cells transfected with wild-type EGFP-tagged human paxillin treated with EGF (not shown).



Western blot - Anti-Paxillin (phospho S126) antibody (ab24402)

20

**All lanes :** Anti-Paxillin (phospho S126) antibody (ab24402) at 1/1000 dilution

Lane 1: A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 2**: A549 whole cell lysate treated with 0.1 ug/mL of HGF treatment for 10 minutes

**Lane 3**: HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 4: HepG2 whole cell lysate with 0.1 ug/mL of HGF treatment for 10 minutes

Lysates/proteins at 30 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG (H+L) Secondary Antibody, HRP conjugate at 1/1000 dilution

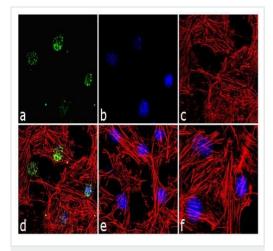
Observed band size: 68 kDa

The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Paxillin (phospho S126) antibody (ab24402)

Immunohistochemical analysis of human breast carcinoma labeling Paxillin (phospho S126) with ab24402 at 1/20 dilution (right) compared to a negative control without primary antibody (left).

To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with ab24402 diluted in 3% BSA-PBS at a dilution of 1/20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting



Immunocytochemistry/ Immunofluorescence - Anti-Paxillin (phospho S126) antibody (ab24402)

Immunofluorescence analysis of 70% confluent log phase NIH/3T3 cells treated with 0.5 ug of PDGF for 10 minutes. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. Labeling Paxillin (phospho S126) with ab24402 at 1/250 dilution in 0.1% BSA and incubated for 3 hours at room temperature. Followed by Goat anti-Rabbit lgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at a dilution of 1/2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Rhodamine Phalloidin at 1/300 dilution. Panel d is a merged image showing punctuated nuclear localization. Panel e is untreated cell with no signal. Panel f is a no primary antibody control. The images were captured at 60X magnification.

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