

Paxillin [pS178] Rabbit Polyclonal Antibody

Store at 2°C to 8°C (short-term), or -20°C (long-term)

Catalog Number: 44-1026G

Pub. No. MAN0010834 Rev. 1.00

Clonality: Polyclonal Quantity: 10 mini-blot size Volume: 100 μL

Host/Class: Rabbit IgG Reactivity: Human Paxillin [pS178] Predicted Reactivity: Human, Mouse

Product description

Paxillin is a 68 kDa cytoskeletal adapter protein involved in organization and function of focal adhesions, which are critical to cell adhesion and migration. This in turn plays a role in a wide variety of processes including embryogenesis, organogenesis, wound repair, inflammation and cancer. Paxillin contains LD motifs, LIM domains, SH3 and SH2 binding domains that serve as docking sites for cytoskeletal proteins, tyrosine kinases (e.g., FAK, Pyk2, Src), serine/threonine kinases, GTPase activating proteins and other adaptor proteins (e.g., actin, vinculin, Crk). Serine 178 is phosphorylated by cdc2 kinase during mitosis.

Product specifications

Immunogen: A chemically synthesized

phosphopeptide derived from a region of human paxillin containing serine 178.

Purification: Antibody negatively

preadsorbed using a nonphosphopeptide then purified by epitope-specific affinity

chromatography

Lot: See product label

Product applications

The antibody has been used in western blotting (1:1000 dilution), and immunohistochemistry. Other applications may work but have not been tested.

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Storage and handling

Store the antibody at 2°C to 8°C for up to 1 week, or apportion into working aliquots and keep at –20°C for long-term storage. Avoid repeated freezing and thawing.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on the Certificate of Analysis.

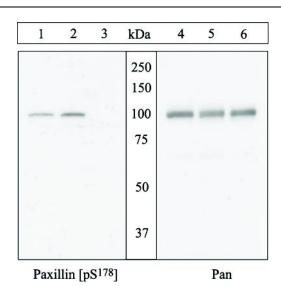


Figure 1 Peptide Competition.

Lysates from untreated EGFP-Paxillin β transfected HEK 293 cells (lanes 1 and 4), EGFP-Paxillin β transfected HEK 293 cells treated with EGF (lanes 2 and 5), and EGFP-Paxillin β S178A mutant transfected HEK 293 cells treated with EGF (lanes 3 and 6) were resolved on a 10% polyacrylamide gel and transferred to PVDF. The membrane was blocked with 5% BSA-TBST for 1 hour at room temperature then incubated with the Paxillin [pS178] antibody (lanes 1–3), or a pan-paxillin antibody (lanes 4–6) for 2 hours at room temperature in 1% milk-TBST. The blots were developed using chemiluminescence (ECL) method with a goat F(ab')2 antirabbit IgG HRP conjugate (Cat. no. ALI4404).

Absence of antibody signal with the mutant protein (lane 3), and a peptide competition assay (data not shown) demonstrates the specificity of the antibody. The data also show that phosphorylation increases with EGF treatment.

Positive controls used

HEK 293 cells transfected with EGFP-Paxillin β with and without EGF treatment, and HEK 293 cells transfected with a EGFP-Paxillin β S178A mutant or A431 cells treated with 100ng/ml EGF for 5 minutes.

Storage buffer

Dulbecco's phosphate buffered saline (without Mg $^{2+}$ and Ca $^{2+}$), pH 7.3 (+/– 0.1), 50% glycerol with 1.0 mg/mL BSA (IgG, protease free) as a carrier, and 0.05% sodium azide.



CAUTION! Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at www.lifetechnologies.com/support.

References

- Woodrow MA, et al. (2003) Ras-induced serine phosphorylation of the focal adhesion protein paxillin is mediated by the Raf-->MEK-->ERK pathway. Exp. Cell Res. 287(2):325-338.
- 2. Schaller, M.D. (2001) Paxillin: a focal adhesion-associated adaptor protein. Oncogene 20(44):6459-6472.

Related products

Product Name	Quantity	Cat. No.
Paxillin [pY31] Polyclonal Antibody, Rabbit	10 blots	44-720G
Paxillin [pY118] Polyclonal Antibody, Rabbit	10 blots	44-722G
Paxillin [pS126] Rabbit Polyclonal Antibody	10 blots	44-1022G
FAK PSSA Antibody Sample Pack	5 vials	44-631G
Pyk2 Antibody Sampler Pack	4 vials	44-638G

Product documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

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Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
***	Manufacturer	REF	Catalog number	LOT	Batch code
Ξ	Use by	X	Temperature limitation		
\bigcap_i	Consult instructions for use	<u> </u>	Caution, consult accompanying documents		

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