

phospho-Paxillin (Ser83) Rabbit pAb

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Catalog # AP93978

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q66H76
Reactivity	Rat
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64019
Physical State	Liquid
Immunogen	KLH conjugated Synthesised phosphopeptide derived from rat Paxillin around the phosphorylation site of Ser83
Epitope Specificity	PP(p-S)PS
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION	Cytoplasm, cytoskeleton. Cell junction, focal adhesion. Cytoplasm, cell cortex. Note=Colocalizes with integrins at the cell periphery.
SIMILARITY	Belongs to the paxillin family. Contains 4 LIM zinc-binding domains.
SUBUNIT	Binds in vitro to vinculin as well as to the SH3 domain of SRC and, when tyrosine phosphorylated, to the SH2 domain of V-CRK. Isoform beta binds to PTK2/FAK1 but weakly to vinculin. Isoform gamma binds to vinculin but only weakly to PTK2/FAK1. Interacts with GIT1, NUDT16L1/SDOS, PARVA and TGFBI1. Component of cytoplasmic complexes, which also contain GIT1, ARHGEF6 and PAK1. Interacts with PTK2/FAK1 and PTK2B/PYK2. Binds ASAP2. Interacts with unphosphorylated ITGA4. Interacts with RNF5 and PDCD10. Interacts with NEK3 and this interaction is prolactin-dependent. Interacts with PTK6.
Post-translational modifications	Phosphorylated by MAPK1/ERK2 (By similarity). Phosphorylated on tyrosine residues during integrin-mediated cell adhesion, embryonic development, fibroblast transformation and following stimulation of cells by mitogens. Phosphorylation at Ser-244 by CDK5 reduces its interaction with PTK2/FAK1 in matrix-cell focal adhesions (MCFA) during oligodendrocytes (OLs) differentiation. Phosphorylation at Tyr-31 and Tyr-118 by PTK6 promote the activation of RAC1 via CRK/CrKII, thereby promoting migration and invasion.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Paxillin is a 64 kDa cytoskeletal adapter protein involved in organisation 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, Pyk 2, Src), serine/threonine kinases, GTPase activating proteins and other adaptor proteins (e.g., Actin, Vinculin, Crk).

Additional Information

Gene ID	360820
Other Names	Paxillin, Pxn {ECO:0000312 RGD:1305759}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

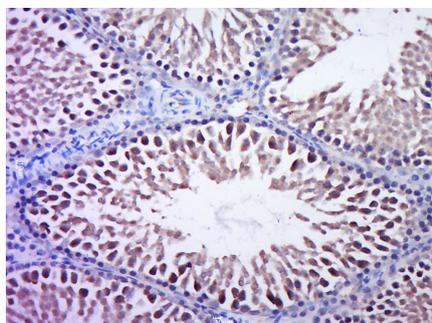
Protein Information

Name	Pxn {ECO:0000312 RGD:1305759}
Function	Cytoskeletal protein involved in actin-membrane attachment at sites of cell adhesion to the extracellular matrix (focal adhesion). Recruits other proteins such as TRIM15 to focal adhesion.
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250 UniProtKB:P49023}. Cell junction, focal adhesion {ECO:0000250 UniProtKB:P49023}. Cytoplasm, cell cortex {ECO:0000250 UniProtKB:Q8VI36}. Note=Colocalizes with integrins at the cell periphery. Colocalizes with PXN to membrane ruffles and the leading edge of migrating cells (By similarity) {ECO:0000250 UniProtKB:P49023}

Background

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Images



Paraformaldehyde-fixed, paraffin embedded (Rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-Paxillin(Ser83)) Polyclonal Antibody, Unconjugated (AP93978) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.