PRODUCT INFORMATION



Paxillin $\alpha/\beta/\gamma$ (N-Term) Rabbit Monoclonal Antibody (Clone RM256) Item No. 32209

Overview and Properties

Contents:	This vial contains 100 μ l of protein A-affinity purified monoclonal antibody.
Immunogen:	Peptide from the N-terminal region of human paxillin $\alpha/\beta/\gamma$
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM256
Host:	Rabbit
Isotype:	IgG
Applications:	Immunocytochemistry (ICC) and Western blot (WB); the recommended starting dilution for ICC and WB is 1:1,000-1:2,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



WB of HeLa cell lysates using Paxillin $\alpha/\beta/\gamma$ (N-Term) Rabbit Monoclonal Antibody (Clone RM256) at a dilution of 1.1 000



Immunofluorescent labeling of HeLa cells labeled with Paxillin $\alpha/\beta/\gamma$ (N-Term) Rabbit Monoclonal Antibody (Clone RM256) (red). Actin filaments have been labeled with fluorescein phalloidin (green) and nuclei labeled

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Paxillin is a focal adhesion adapter protein that facilitates the assembly of multiprotein complexes that mediate signal transduction between the extracellular matrix and actin cytoskeleton.¹⁻³ It contains four LIM domains in the C-terminal region that target paxillin to focal adhesions and an N-terminal region with five LD motifs that serve as docking sites for a variety of proteins, including vinculin, focal adhesion kinase (FAK), and Src, that facilitate intracellular signal transduction.³ Alternative splicing of *PXN* generates three isoforms, α , β , and γ , that contain a variable N-terminus, as well as a fourth isoform, δ , that lacks the N-terminal region.³ Paxillin is expressed in most tissues and predominately localizes to focal adhesions on the cell membrane.^{2,3} Upon cytokine or growth factor stimulation or cell adhesion, paxillin is phosphorylated by a variety of kinases, including FAK and ERK, providing a scaffold for signaling proteins that are involved in the formation and regulation of focal adhesions, which mediate cell migration.³ It is also expressed in the cytoplasm and nucleus where it regulates gene transcription. Tumor paxillin levels are increased in patients with glioblastoma multiforme (GBM) and associated with poor survival. Cayman's Paxillina/ β/γ (N-Term) Rabbit Monoclonal Antibody (Clone RM256) can be used for immunocytochemistry (ICC) and Western blot (WB) applications.

References

- 1. Ma, X. and Hammes, S.R. Paxillin actions in the nucleus. Steroids 133, 87-92 (2018).
- 2. Kanteti, R., Batra, S.K., Lennon, F.E., *et al.* FAK and paxillin, two potential targets in pancreatic cancer. *Oncotarget* **7(21)**, 31586-31601 (2016).
- 3. López-Colomé, A.-M., Lee-Rivera, I., Benavides-Hidalgo, R., et al. Paxillin: A crossroad in pathological cell migration. J. Hematol. Oncol. 10(1), 50 (2017).

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