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Anti-Gamma-adducin Antibody

Catalog # AP50966

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9UEY8
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79155

Additional Information

Gene ID	120
Other Names	ADDL; Gamma-adducin; Adducin-like protein 70
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Gamma-adducin. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

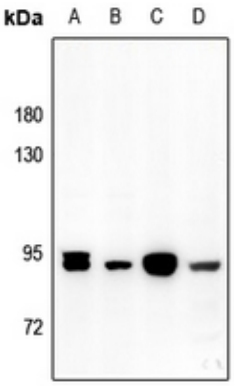
Name	ADD3
Synonyms	ADDL
Function	Membrane-cytoskeleton-associated protein that promotes the assembly of the spectrin-actin network. Plays a role in actin filament capping (PubMed:23836506). Binds to calmodulin (Probable). Involved in myogenic reactivity of the renal afferent arteriole (Af-art), renal interlobular arteries and middle cerebral artery (MCA) to increased perfusion pressure. Involved in regulation of potassium channels in the vascular smooth muscle cells (VSMCs) of the Af-art and MCA ex vivo. Involved in regulation of glomerular capillary pressure, glomerular filtration rate (GFR) and glomerular nephrin expression in response to hypertension. Involved in renal blood flow (RBF) autoregulation. Plays a role in podocyte structure and function. Regulates globular monomer actin (G-actin) and filamentous polymer actin (F-actin) ratios in the primary podocytes affecting actin cytoskeleton organization. Regulates expression of synaptopodin, RhoA, Rac1 and CDC42 in the renal cortex and the primary podocytes. Regulates expression of nephrin in the

	glomeruli and in the primary podocytes, expression of nephrin and podocinin in the renal cortex, and expression of focal adhesion proteins integrin alpha-3 and integrin beta-1 in the glomeruli. Involved in cell migration and cell adhesion of podocytes, and in podocyte foot process effacement. Regulates expression of profibrotics markers MMP2, MMP9, TGF beta-1, tubular tight junction protein E- cadherin, and mesenchymal markers vimentin and alpha-SMA (By similarity). Promotes the growth of neurites (By similarity).
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q62847}. Cell membrane {ECO:0000250|UniProtKB:Q62847}; Peripheral membrane protein; Cytoplasmic side. Cytoplasm {ECO:0000250|UniProtKB:Q9QYB5}. Note=Full-length protein and the cleavage fragment 358-706 localize mainly to the cytoplasm, while cleavage fragment 1-357 translocates from the cytoplasm to the nucleus. {ECO:0000250|UniProtKB:Q9QYB5}
Tissue Location	[Isoform 1]: ubiquitously expressed.

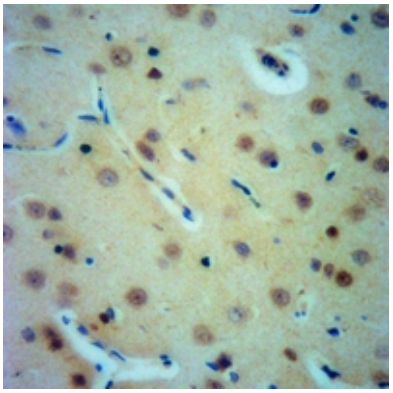
References

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Bechtel S.,et al.BMC Genomics 8:399-399(2007).
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Images

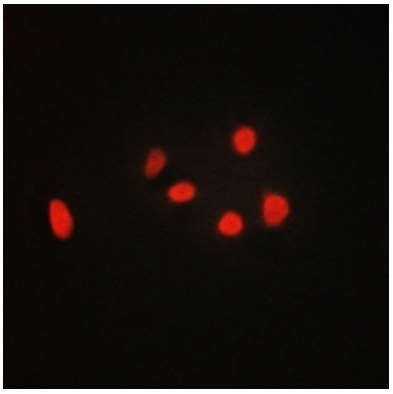


Western blot analysis of Gamma-adducin expression in HepG2 (A), A2780 (B), PC12 (C), SP20 (D) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 94 kD)



Immunohistochemical analysis of Gamma-adducin staining in human heart formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Immunofluorescent analysis of Gamma-adducin staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and



blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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