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DAAM1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2720a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9Y4D1
Other Accession	Q8BPM0
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB10610
Calculated MW	123473
Antigen Region	45-74

Additional Information

Gene ID	23002
Other Names	Disheveled-associated activator of morphogenesis 1, DAAM1, KIAA0666
Target/Specificity	This DAAM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 45-74 amino acids from the N-terminal region of human DAAM1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DAAM1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DAAM1
Synonyms	KIAA0666
Function	Binds to disheveled (Dvl) and Rho, and mediates Wnt-induced Dvl-Rho

	complex formation. May play a role as a scaffolding protein to recruit Rho-GDP and Rho-GEF, thereby enhancing Rho-GTP formation. Can direct nucleation and elongation of new actin filaments. Involved in building functional cilia (PubMed:16630611, PubMed:17482208). Involved in the organization of the subapical actin network in multiciliated epithelial cells (By similarity). Together with DAAM2, required for myocardial maturation and sarcomere assembly (By similarity). During cell division, may regulate RHOA activation that signals spindle orientation and chromosomal segregation.
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, cilium basal body. Note=Perinuclear. Colocalizes with RHOA and KANK1 around centrosomes. {ECO:0000250|UniProtKB:Q8BPM0}
Tissue Location	Expressed in all tissues examined.

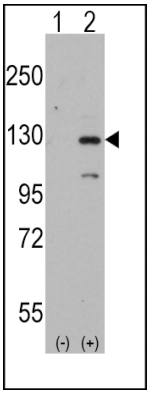
Background

Functions of the cell cortex, including motility, adhesion, and cytokinesis, are mediated by the reorganization of the actin cytoskeleton. Recent evidence suggests a role for the Formin homology (FH) proteins in these processes. DAAM1 contains FH domains and belongs to a novel FH protein subfamily implicated in cell polarity. Wnt/Fz signaling activates the small GTPase Rho, a key regulator of cytoskeleton architecture, to control cell polarity and movement during development. Activation requires Dvl-Rho complex formation, an assembly mediated by DAAM1, which is thought to function as a scaffolding protein.

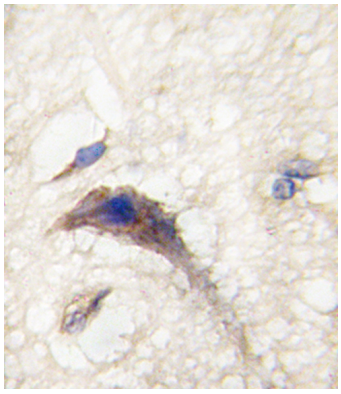
References

Liu,W., Proc. Natl. Acad. Sci. U.S.A. 105 (1), 210-215 (2008)
Yamashita,M.,Genes Cells 12 (11), 1255-1265 (2007)
Lu,J., J. Mol. Biol. 369 (5), 1258-1269 (2007)

Images



Western blot analysis of DAAM1 (arrow) using rabbit polyclonal DAAM1 Antibody(Human N-term) (Cat.#AP2720a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the DAAM1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human brain tissue reacted with DAAM1 Antibody (N-term) (Cat.#AP2720a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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