

DAAM2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7595a

Product Information

Application	WB, IHC-P, E
Primary Accession	<u>Q86T65</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB10613
Calculated MW	123499
Antigen Region	68-97

Additional Information

Gene ID	23500
Other Names	Disheveled-associated activator of morphogenesis 2, DAAM2, KIAA0381
Target/Specificity	This DAAM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 68-97 amino acids from the N-terminal region of human DAAM2.
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	DAAM2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DAAM2 (<u>HGNC:18143</u>)
Function	Key regulator of the Wnt signaling pathway, which is required for various processes during development, such as dorsal patterning, determination of left/right symmetry or myelination in the central nervous system. Acts downstream of Wnt ligands and upstream of beta- catenin (CTNNB1). Required for canonical Wnt signaling pathway during patterning in the dorsal

	spinal cord by promoting the aggregation of Disheveled (Dvl) complexes, thereby clustering and formation of Wnt receptor signalosomes and potentiating Wnt activity. During dorsal patterning of the spinal cord, inhibits oligodendrocytes differentiation via interaction with PIP5K1A. Also regulates non- canonical Wnt signaling pathway. Acts downstream of PITX2 in the developing gut and is required for left/right asymmetry within dorsal mesentery: affects mesenchymal condensation by lengthening cadherin-based junctions through WNT5A and non-canonical Wnt signaling, inducing polarized condensation in the left dorsal mesentery necessary to initiate gut rotation. Together with DAAM1, required for myocardial maturation and sarcomere assembly. Is a regulator of actin nucleation and elongation, filopodia formation and podocyte migration (PubMed: <u>33232676</u>).
Tissue Location	Expressed in most tissues examined. Expressed in kidney glomeruli (PubMed:33232676).

Background

DAAM2 is a 1068 amino acis protein belonging to the formin homology family. It contains one of each DAD (diaphanous autoregulatory), FH1 (formin homology 1), FH2 (formin homology 2) and GBD/FH3 (Rho GTPase-binding/formin homology 3) domain. Its main function is actin cytoskeleton organization, thus leading to cell organization and biogenesis. It plays a role in Rho GTPase binding and is expressed mostly in spinal cord and nerve tissues.

References

Katoh, M., Int. J. Oncol. 22 (4), 915-920 (2003)

Images





Western blot analysis of DAAM2 (Human N-term) (Cat. #AP7595a) in 293 cell line lysates (35ug/lane). DAAM2 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human brain tissue reacted with DAAM2 Antibody (N-term) (Cat.#AP7595a), 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'.