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Nephrocystin 4 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57435

Product Information

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	O75161
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	157598

Additional Information

Gene ID	261734
Other Names	Nephrocystin-4, Nephroretinin, NPHP4, KIAA0673
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=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	NPHP4
Synonyms	KIAA0673
Function	Involved in the organization of apical junctions; the function is proposed to implicate a NPHP1-4-8 module (PubMed:19755384, PubMed:21565611). Does not seem to be strictly required for ciliogenesis (PubMed:21565611). Required for building functional cilia. Involved in the organization of the subapical actin network in multiciliated epithelial cells. Seems to recruit INT to basal bodies of motile cilia which subsequently interacts with actin-modifying proteins such as DAAM1 (By similarity). In cooperation with INVS may down- regulate the canonical Wnt pathway and promote the Wnt-PCP pathway by regulating expression and subcellular location of disheveled proteins. Stabilizes protein levels of JADE1 and promotes its translocation to the nucleus leading to cooperative inhibition of canonical Wnt signaling (PubMed:21498478, PubMed:22654112). Acts as a negative regulator of the hippo pathway by association with LATS1 and modifying LATS1-dependent phosphorylation and localization of WWTR1/TAZ (PubMed:21555462).
Cellular Location	Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell junction, tight junction

	{ECO:0000250|UniProtKB:P59240}. Nucleus Note=In cultured renal cells, it localizes diffusely in the cytoplasm but, as cells approach confluence, it accumulates to basolateral tight junctions (By similarity). Localizes to the ciliary transition zone (By similarity). In the retinal photoreceptor cell layer, localizes at the connecting cilium (By similarity). {ECO:0000250|UniProtKB:P59240}
Tissue Location	Expressed in kidney, skeletal muscle, heart and liver, and to a lesser extent in brain and lung

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