Anti-NPHP1 antibody

Description	Unconjugated Rabbit polyclonal to NPHP1

Model	STJ191046
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human NPHP1 protein.
Immunogen Region	510-590aa
Gene ID	4867
Gene Symbol	NPHP1
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	NPHP1 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Widespread expression, with highest levels in pituitary gland, spinal cord, thyroid gland, testis, skeletal muscle, lymph node and trachea. Weakly expressed in heart, kidney and pancreas. Expressed in nasal epithelial cells (at protein level).
Purification	NPHP1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Nephrocystin-1 Juvenile nephronophthisis 1 protein
Molecular Weight	80 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7905OMIM:256100
Alternative Names	Nephrocystin-1 Juvenile nephronophthisis 1 protein
Function	Together with BCAR1 it may play a role in the control of epithelial cell polarity. Involved in the organization of apical junctions in kidney cells together with NPHP4 and RPGRIP1L/NPHP8 . Does not seem to be strictly required for ciliogenesis . Seems to help to recruit PTK2B/PYK2 to cell matrix adhesions, thereby initiating phosphorylation of PTK2B/PYK2 and PTK2B/PYK2-dependent signaling. May play a role in the regulation of intraflagellar transport (IFT) during cilia assembly. Required for normal retina development. In connecting photoreceptor cilia influences the movement of some IFT proteins such as IFT88 and WDR19. Involved in spermatogenesis .
Sequence and Domain Family	The SH3 domain mediates the stable interaction with Cas.
Cellular Localization	Cell junction, adherens junction Cell projection, cilium. Cytoplasm, cytoskeleton, cilium axoneme. Cell junction, tight junction. Colocalizes with E-cadherin and BCAR1 at or near the cell-cell adherens junctions . Localized to respiratory cilia axoneme. Localized to the transition zone of respiratory cilia, photoreceptor-connecting cilia and renal monocilia. In cultured renal cells, it localizes diffusely in the cytoplasm but, as cells approach confluence, it accumulates to basolateral tight junctions.
Post-translational Modifications	Phosphorylation by CK2 is required for the interaction with PACS1 and the targeting to the base region of cilia.