

## Anti-NPHP1 antibody



<b>Description</b>	Unconjugated Rabbit polyclonal to NPHP1
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<b>Model</b>	STJ191046
<b>Host</b>	Rabbit
<b>Reactivity</b>	Human, Mouse
<b>Applications</b>	ELISA, WB
<b>Immunogen</b>	Synthesized peptide derived from human NPHP1 protein.
<b>Immunogen Region</b>	510-590aa
<b>Gene ID</b>	<a href="#">4867</a>
<b>Gene Symbol</b>	<a href="#">NPHP1</a>
<b>Dilution range</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Specificity</b>	NPHP1 Polyclonal Antibody detects endogenous levels of protein.
<b>Tissue Specificity</b>	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).
<b>Purification</b>	NPHP1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Note</b>	For Research Use Only (RUO).
<b>Protein Name</b>	Nephrocystin-1 Juvenile nephronophthisis 1 protein
<b>Molecular Weight</b>	80 kDa

<b>Clonality</b>	Polyclonal
<b>Conjugation</b>	Unconjugated
<b>Isotype</b>	IgG
<b>Formulation</b>	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Concentration</b>	1 mg/ml
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.
<b>Database Links</b>	<a href="HGNC:7905">HGNC:7905</a> <a href="MIM:256100">MIM:256100</a>
<b>Alternative Names</b>	Nephrocystin-1 Juvenile nephronophthisis 1 protein
<b>Function</b>	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.
<b>Sequence and Domain Family</b>	The SH3 domain mediates the stable interaction with Cas.
<b>Cellular Localization</b>	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.
<b>Post-translational Modifications</b>	Phosphorylation by CK2 is required for the interaction with PACS1 and the targeting to the base region of cilia.

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**St John's Laboratory Ltd**

**F** +44 (0)207 681 2580  
**T** +44 (0)208 223 3081

**W** <http://www.stjohnslabs.com/>  
**E** [info@stjohnslabs.com](mailto:info@stjohnslabs.com)