abcam

Product datasheet

Anti-NPHP1 antibody ab211422

2 Images

Overview

Product name	Anti-NPHP1 antibody
Description	Rabbit polyclonal to NPHP1
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment corresponding to Human NPHP1 aa 1-150. Database link: **O15259-1**
Positive control	IHC-P: Human tonsil and colon tissues.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.03% Proclin 300 Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine)
Purity	Caprylic Acid - Ammonium Sulfate precipitation
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab211422 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 10 µg/ml.

Target

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 (By similarity). Does not seem to be strictly required for ciliogenesis (By similarity). 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.

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).

Involvement in disease
Nephronophthisis 1
Senior-Loken syndrome 1
Joubert syndrome 4

Sequence similarities
Belongs to the nephrocystin-1 family.
Contains 1 SH3 domain.

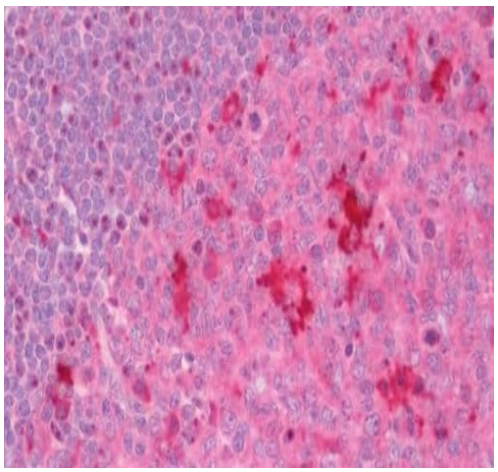
Developmental stage
During in vitro ciliogenesis translocalizes from the cytoplasm to the ciliary transition zone during epithelial cell polarization.

Domain
The SH3 domain mediates the stable interaction with Cas.

Post-translational modifications
Phosphorylation by CK2 is required for the interaction with PACS1 and the targeting to the base region of cilia.

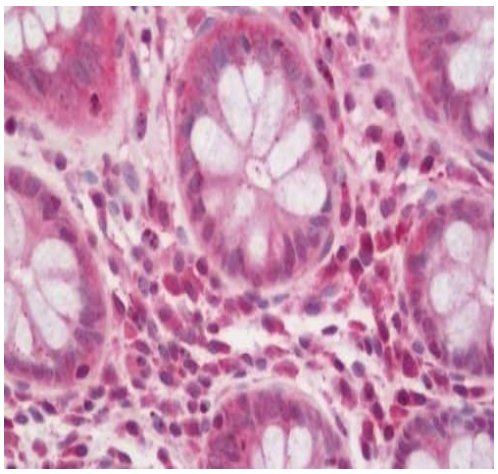
Cellular localization
Cell junction, adherens junction. Cell projection, cilium. Cytoplasm, cytoskeleton, cilium axoneme. Cell junction, tight junction. Colocalizes with E-cadherin and BCAR1 at or near the cell-cell adherens junctions (By similarity). Localized to respiratory cilia axoneme. Localized 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.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NPHP1 antibody (ab211422)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human tonsil tissue labeling NPHP1 with ab211422 at 10 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NPHP1 antibody (ab211422)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human colon tissue labeling NPHP1 with ab211422 at 10 µg/ml.

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