



Nephrocystin-4 Polyclonal Antibody

Catalog No	YP-Ab-04036
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	NPHP4
Protein Name	Nephrocystin-4
Immunogen	The antiserum was produced against synthesized peptide derived from human NPHP4. AA range:877-926
Specificity	Nephrocystin-4 Polyclonal Antibody detects endogenous levels of Nephrocystin-4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NPHP4; KIAA0673; Nephrocystin-4; Nephroretinin
Observed Band	
Cell Pathway	Cytoplasm, cytoskeleton, cilium basal body . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cell junction, tight junction . Nucleus . 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). .
Tissue Specificity	Expressed in kidney, skeletal muscle, heart and liver, and to a lesser extent in brain and lung.
Function	disease:Defects in NPHP4 are the cause of nephronophthisis type 4 (NPHP4) [MIM:606966]; also known as familial juvenile nephronophthisis 4. NPHP4 is an autosomal recessive inherited disease resulting in end-stage renal disease at age ranging between 6 and 35 years. It is a progressive tubulo-interstitial kidney disorder characterized by polydipsia, polyuria, anemia and growth retardation. The most prominent histological features are modifications of the tubules with thickening of the basement membrane, interstitial fibrosis and, in the advanced stages, medullary cysts.,disease:Defects in NPHP4 are the cause of Senior-Loken syndrome type 4 (SLSN4) [MIM:606996]. SLSN is a renal-retinal disorder characterized by progressive wasting of the filtering unit of the kidney,



with or without medullary cystic renal disease, and progressive eye disease. Typically this disorder becomes apparent during

Background

This gene encodes a protein involved in renal tubular development and function. This protein interacts with nephrocystin, and belongs to a multifunctional complex that is localized to actin- and microtubule-based structures. Mutations in this gene are associated with nephronophthisis type 4, a renal disease, and with Senior-Loken syndrome type 4, a combination of nephronophthisis and retinitis pigmentosa. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014],

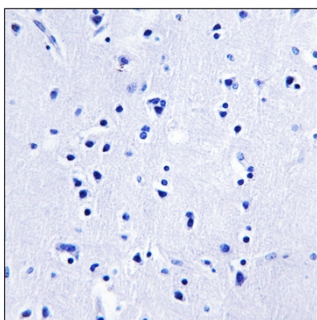
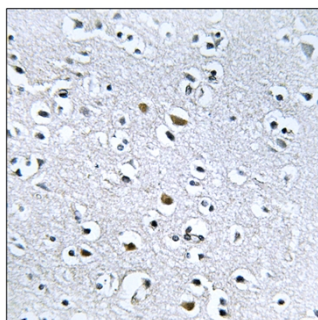
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human brain, using NPHP4 Antibody. The picture on the right is blocked with the synthesized peptide.