

### **Nephrocystin-4 Polyclonal Antibody**

Catalog No: YT3037

**Reactivity:** Human; Rat; Mouse;

**Applications:** IHC;IF;ELISA

Target: Nephrocystin-4

Gene Name: NPHP4

Protein Name: Nephrocystin-4

Human Gene Id: 261734

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Immunogen:

P59240

O75161

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

**Dilution :** IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 158kD



### **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],

### **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

# Subcellular Location:

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).

### **Expression:**

Expressed in kidney, skeletal muscle, heart and liver, and to a lesser extent in

brain and lung.

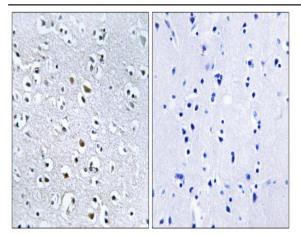
Sort:

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No4:

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## **Products Images**



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