

### PKD1 (aa2281-2292) Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF3578a

## **Specification**

# PKD1 (aa2281-2292) Antibody (C-Term) - Product Information

Application

Primary Accession P98161

Other Accession NP 001009944.2, NP 000287.3, 5310, 18763

(mouse), 24650 (rat)

Predicted Human, Mouse, Rat, Pig, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 462529

# PKD1 (aa2281-2292) Antibody (C-Term) - Additional Information

### **Gene ID 5310**

### **Other Names**

Polycystin-1, Autosomal dominant polycystic kidney disease 1 protein, PKD1

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

# **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

PKD1 (aa2281-2292) Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

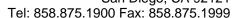
# PKD1 (aa2281-2292) Antibody (C-Term) - Protein Information

# Name PKD1 (HGNC:9008)

#### **Function**

Component of a heteromeric calcium-permeable ion channel formed by PKD1 and PKD2 that is activated by interaction between PKD1 and a Wnt family member, such as WNT3A and WNT9B (PubMed:<a href="http://www.uniprot.org/citations/27214281" target="\_blank">27214281</a>). Both PKD1 and PKD2 are required for channel activity (PubMed:<a href="http://www.uniprot.org/citations/27214281" target="\_blank">27214281</a>). Involved in renal tubulogenesis (PubMed:<a href="http://www.uniprot.org/citations/12482949"

target="\_blank">12482949</a>). Involved in fluid- flow mechanosensation by the primary cilium





in renal epithelium (By similarity). Acts as a regulator of cilium length, together with PKD2 (By similarity). The dynamic control of cilium length is essential in the regulation of mechanotransductive signaling (By similarity). The cilium length response creates a negative feedback loop whereby fluid shear-mediated deflection of the primary cilium, which decreases intracellular cAMP, leads to cilium shortening and thus decreases flow- induced signaling (By similarity). May be an ion-channel regulator. Involved in adhesive protein-protein and protein-carbohydrate interactions. Likely to be involved with polycystin-1-interacting protein 1 in the detection, sequestration and exocytosis of senescent mitochondria (PubMed: <a href="http://www.uniprot.org/citations/37681898" target=" blank">37681898</a>).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Cell projection, cilium {ECO:0000250|UniProtKB:O08852}. Endoplasmic reticulum {ECO:0000250|UniProtKB:O08852}. Golgi apparatus {ECO:0000250|UniProtKB:008852}. Vesicle Secreted, extracellular exosome Note=PKD1 localization to the plasma and ciliary membranes requires PKD2, is independent of PKD2 channel activity, and involves stimulation of PKD1 autoproteolytic cleavage at the GPS domain. PKD1:PKD2 interaction is required to reach the Golgi apparatus from endoplasmic reticulum and then traffic to the cilia (By similarity). Ciliary localization of PKD1 requires BBS1 and ARL6/BBS3 (By similarity). Cell surface localization requires GANAB (PubMed:27259053). Detected on migrasomes and on extracellular exosomes in urine (PubMed:37681898) {ECO:0000250|UniProtKB:008852, ECO:0000269|PubMed:27259053, ECO:0000269|PubMed:37681898}

## PKD1 (aa2281-2292) Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PKD1 (aa2281-2292) Antibody (C-Term) - Images

PKD1 (aa2281-2292) Antibody (C-Term) - Background

This antibody is expected to recognize both reported isoforms (NP 001009944.2; NP 000287.3).

# PKD1 (aa2281-2292) Antibody (C-Term) - References

Endothelial cells from humans and mice with polycystic kidney disease are characterized by polyploidy and chromosome segregation defects through survivin down-regulation. AbouAlaiwi WA, Ratnam S, Booth RL, Shah JV, Nauli SM. Hum Mol Genet. 2011 Jan 15;20(2):354-67. PMID: 21041232