

# Rabbit Anti-PKD2L1 antibody

SL23401R

Product Name:	PKD2L1
Chinese Name:	多囊肾疾病因子1蛋白抗体
Alias:	Polycystin 2 Like 1, Transient Receptor Potential Cation Channel; Transient Receptor Potential Cation Channel, Subfamily P, Member 3; Polycystin-2 Homolog; Polycystin- 2L1; Polycystin-L1; Polycystin-L; PKD2L; TRPP3; PKDL; Polycystic Kidney Disease 2-Like 1 Protein; Polycystic Kidney Disease 2-Like 1; PCL; PK2L1_HUMAN;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	92kDa
<b>Cellular localization:</b>	The cell membrane
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PKD2L1:1- 100/805 <cytoplasmic></cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a member of the polycystin protein family. The encoded protein contains multiple transmembrane domains, and cytoplasmic N- and C-termini. The protein may be an integral membrane protein involved in cell-cell/matrix interactions.

This protein functions as a calcium-regulated nonselective cation channel. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]

## Function:

Pore-forming subunit of a ciliary calcium channel that controls calcium concentration within primary cilia without affecting cytoplasmic calcium concentration. Forms a heterodimer with PKD1L1 in primary cilia and forms a calcium-permeant ciliary channel that regulates sonic hedgehog/SHH signaling and GLI2 transcription. May act as a sour taste receptor by forming a calcium channel with PKD1L3 in gustatory cells; however, its contribution to sour taste perception is unclear in vivo and may be indirect.

### Subunit:

Homotrimer; trimerization is independent of calcium-binding. Calcium channels are probably composed of 3 subunit of PKD2L1 and 1 subunit of some PKD1 protein (PKD1, PKD1L1, PKD1L2 or PKDL3). Interacts with PKD1. Interacts with PKD1L1; to form ciliary calcium channel. Interacts with PKD1L3, to form putative sour taste receptor. Interacts with RACK1; inhibits the channel activity possibly by impairing localization to the cell membrane.

#### Subcellular Location:

Cell projection ? cilium membrane; Multi-pass membrane protein

#### **Tissue Specificity:**

Expressed in adult heart, skeletal muscle, brain, spleen, testis, retina and liver. According to PubMed:9748274, expressed at high levels in fetal tissues, including kidney and liver, and down-regulated in adult tissues. According to PubMed:10602361, expressed in fetal brain, but not expressed in fetal lung, liver or kidney. Isoform 4 appears to be expressed only in transformed lymphoblasts.

#### Similarity:

Belongs to the polycystin family.

# SWISS:

Q9P0L9

**Gene ID:** 9033

#### Database links:

Entrez Gene: 9033Human

Entrez Gene: 329064Mouse

SwissProt: Q9P0L9Human

	SwissProt: A2A259Mouse
	<b>Important Note:</b> This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous
	peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PKD2L1) Polyclonal
	Antibody, Unconjugated (SL23401R) at 1:400 overnight at 4°C, followed by
	operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.