



Polycystin 1 Rabbit pAb

Catalog No	YP-Ab-18519
Isotype	IgG
Reactivity	Human,Rat
Applications	WB
Gene Name	PKD1
Immunogen	Synthesized peptide derived from human protein . at AA range: 4100-4150
Specificity	This antibody detects endogenous levels of Polycystin 1 at Human, Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Autosomal dominant polycystic kidney disease 1 protein;Autosomal dominant polycystic kidney disease protein 1;nPKC-D1;nPKC-mu;OTTHUMP28669;OTTHUMP2867;PBP;Pc-1;PKD;Pkd1;PKD1_HUMAN;Polycystic Kidney Disease 1;polycystic kidney disease-associated protein;Polycystin 1 Precursor;Polycystin-1;Protein kinase C mu type;Protein kinase D;Serine/threonine-protein kinase D1;transient receptor potential cation channel;subfamily P;member 1;TRPP1;Polycystin-1 (Autosomal dominant polycystic kidney disease 1 protein)
Observed Band	473kD
Calculated Molecular Weight	462kDa; 463kD(Calculated).
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Cell projection, cilium . Endoplasmic reticulum . Golgi apparatus . 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). .
Tissue Specificity	

**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 . Both PKD1 and PKD2 are required for channel activity . Involved in renal tubulogenesis . 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.

Background**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