



# Anti-PKD1 (extracellular domain) polyclonal antibody (CPBT-43616RH)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Rabbit Polyclonal antibody to Human PKD1.
<b>Antigen Description</b>	This gene encodes a member of the polycystin protein family. The encoded glycoprotein contains a large N-terminal extracellular region, multiple transmembrane domains and a cytoplasmic C-tail. It is an integral membrane protein that functions as a regulator of calcium permeable cation channels and intracellular calcium homoeostasis. It is also involved in cell-cell/matrix interactions and may modulate G-protein-coupled signal-transduction pathways. It plays a role in renal tubular development, and mutations in this gene cause autosomal dominant polycystic kidney disease type 1 (ADPKD1). ADPKD1 is characterized by the growth of fluid-filled cysts that replace normal renal tissue and result in end-stage renal failure. Splice variants encoding different isoforms have been noted for this gene. Also, six pseudogenes, closely linked in a known duplicated region on chromosome 16p, have been described.
<b>Immunogen</b>	A synthetic peptide from a PKD domain in the first extracellular loop of human Polycystin 1, conjugated to an immunogenic carrier protein.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Whole antiserum
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC-Fr, IHC-P
<b>Sequence Similarities</b>	Belongs to the polycystin family.Contains 1 C-type lectin domain.Contains 1 GPS domain.Contains 1 LDL-receptor class A domain.Contains 2 LRR (leucine-rich)

repeats.Contains 1 LRRCT domain.Contains 1 LRRNT domain.Contains 17 PKD domains.Contains 1 PLAT dom

<b>Cellular Localization</b>	Membrane.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	Preservative: NoneConstituents: Whole serum
<b>Preservative</b>	None
<b>Storage</b>	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C (add glycerol to a final volume of 40% for extra stability). Avoid repeated freeze / thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">PKD1 polycystic kidney disease 1 (autosomal dominant) [ Homo sapiens ]</a>
<b>Official Symbol</b>	PKD1
<b>Synonyms</b>	PKD1; polycystic kidney disease 1 (autosomal dominant); polycystin-1; PBP; Pc 1; polycystin 1; transient receptor potential cation channel; subfamily P; member 1; TRPP1; Autosomal dominant polycystic kidney disease 1 protein; Autosomal dominant polycystic kidney disease protein 1; OTTHUMP00000208669; OTTHUMP00000208670; PBP; Pc-1; PKD; PKD1; PKD1_HUMAN; Polycystic Kidney Disease 1; polycystic kidney disease-associated protein; Polycystin 1 Precursor; Polycystin-1; transient receptor potential cation channel, subfamily P, member 1; TRPP1; polycystic kidney disease-associated protein; autosomal dominant polycystic kidney disease 1 protein; transient receptor potential cation channel, subfamily P, member 1; Pc-1;
<b>Entrez Gene ID</b>	<a href="#">5310</a>
<b>Protein Refseq</b>	<a href="#">NP_000287</a>
<b>UniProt ID</b>	<a href="#">P98161</a>
<b>Chromosome Location</b>	16p13.3
<b>Function</b>	cation channel activity; protein binding; protein domain specific binding; protein kinase binding; sugar binding;