

Supplementary Table 1 - Cell lines.

Mouse Inner Medullary Collecting Duct 3 cell lines (mIMCD3)				
Name	Gene/s	Reference Alleles	Clones^{-/-}	Clones^{+/-}
Pkd1	<i>Pkd1</i>	Δ Chr. 17: 24'550'055 - 24'594'963 / Δ Chr. 17: 24'550'106 - 24'594'903	3	
Pkd1 ^{Rescue}	<i>Pkd1</i>	Δ Chr. 17: 24'550'055 - 24'594'963 / Δ Chr. 17: 24'550'106 - 24'594'903 ; Tg(Pkd1)	1	
Pkd1 ^{Flag}	<i>Pkd1</i>	Tg(3×Flag) after Chr. 17: 24'550'343	2	5
Pkd1 ^{V5}	<i>Pkd1</i>	Tg(2×V5) after Chr. 17: 24'588'581		3
Pkd2	<i>Pkd2</i>	Δ Chr. 5: 104'478'281 - 104'490'878	4	
Pkd2 ^{Rescue}	<i>Pkd2</i>	Δ Chr. 5: 104'478'281 - 104'490'878 ; Tg(PKD2)	1	
Pkd-dKO	<i>Pkd1 + Pkd2</i>	Δ Chr. 5: 104'478'281 - 104'490'878 ; Δ Chr. 17: 24'550'042 - 24'594'890 / Δ Chr. 17: 24'550'106 - 24'594'903	3	
Pkd-dKO ^{Rescue}	<i>Pkd1 + Pkd2</i>	Δ Chr. 5: 104'478'281 - 104'490'878 ; Δ Chr. 17: 24'550'042 - 24'594'890 / Δ Chr. 17: 24'550'106 - 24'594'903 ; Tg(Pkd1) ; Tg(PKD2)	1	
Lama5 ^{GFP}	<i>Lama5</i>	Tg(GFP) after Chr. 2: 180'176'550		3
Madin-Darby Canine Kidney cell lines (MDCK)				
Name	Gene/s	Reference Alleles	Clones^{-/-}	Clones^{+/-}
Pkd1	<i>Pkd1</i>	Δ Chr. 6: 38'836'147 - 38'865'462	5	1
Pkd1 ^{Rescue}	<i>Pkd1</i>	Δ Chr. 6: 38'836'147 - 38'865'462 ; Tg(Pkd1)	1	
Pkd2	<i>Pkd2</i>	Δ Chr. 32: 11'381'232 - 11'438'424	2	2
Pkd2 ^{Rescue}	<i>Pkd2</i>	Δ Chr. 32: 11'381'232 - 11'438'424 ; Tg(PKD2)	1	

Supplementary Table 2 - TALEN and sgRNA binding sites.

Mouse Inner Medullary Collecting Duct 3 cells (mIMCD3)			
Target	Type	Name	Binding site
<i>Pkd1</i>	CRISPR	mPkd1_sgRNA_1	TCTGGGGCAGGCCGCACCTC
		mPkd1_sgRNA_2	GTCGCACCGCAGACGGGCCA
		mPkd1_sgRNA_3	AGAGCTCGCCACGCAAGGCG
		mPkd1_sgRNA_4	ACCCCAGGACTATGAGATGG
<i>Pkd1^{Flag}</i>	CRISPR	mPkd1 ^{Flag} _sgRNA_1	CGAGCCACAGGCCCAGGCCT
		mPkd1 ^{Flag} _sgRNA_2	GAGACCCTGGGCGCGGCTGC
		mPkd1 ^{Flag} _sgRNA_3	GCGCAGGGCCGCAAAAGCAG
		mPkd1 ^{Flag} _sgRNA_4	GCGTCAATTGCTCCGGCCGC
<i>Pkd1^{V5}</i>	CRISPR	mPkd1 ^{V5} _sgRNA_1	AATAACAAGGTCCACCCCAG
		mPkd1 ^{V5} _sgRNA_2	CCTAATAACAAGGTCCACCC
<i>Pkd2</i>	TALEN	mPkd2_TALEN_1	CAGTAAATGCAGAGAGGA
		mPkd2_TALEN_2	ACATGTAGAGTCAGTCCA
		mPkd2_TALEN_3	CTCTCATGCTTGATCACC
		mPkd2_TALEN_4	TCTGCTTTTCATAGGTTA
<i>Lama5</i>	TALEN	mLama5_TALEN_1	TCATAGAAAGTGTAGGCA
		mLama5_TALEN_2	TTGGCATTGAGGGTTCCC
		mLama5_TALEN_3	CGGTAGGCAGGGAGCTCT
		mLama5_TALEN_4	CTGTATTTTCAGAGTCTT
Madin-Darby Canine Kidney cells (MDCK)			
Target	Type	Name	Binding site
<i>Pkd1</i>	TALEN	cPkd1_TALEN_1	GCTGGTTGCCGTGAGACC
		cPkd1_TALEN_2	GCTTCACCCTGCAGACCT
		cPkd1_TALEN_3	GGCCACAGTTACAGCCTT
		cPkd1_TALEN_4	TATTTGACTTTGTCTGGGT
<i>Pkd2</i>	TALEN	cPkd2_TALEN_1	TTTAAGGTA ACTAAGTTA
		cPkd2_TALEN_2	TGGATTCTGGCCTATTCT
		cPkd2_TALEN_3	TGGTAAGTTGCCAATCAA
		cPkd2_TALEN_4	TCCCATCAGATCAAAGTG

Supplementary Table 3 - Genotyping of mIMCD3 cell lines.

Mouse Inner Medullary Collecting Duct 3 cell lines (mIMCD3)			
Feature	Name	Oligonucleotide	Product (bp)
<i>Pkd1</i>	mPkd1_1	AGATGGCCATCCTGGTAGGT	582
	mPkd1_2	CTAGGTGGGAGCACAACCTGG	
<i>Pkd1^{-/-}</i>	mPkd1_3	CCACCTACAGCCAACCTTGGGA	45'243 (wt)
	mPkd1_2	CTAGGTGGGAGCACAACCTGG	300 + 411 (-/-)
<i>Pkd1^{Flag}</i>	mPkd1-Flag_1	CCACCTACAGCCAACCTTGGGA	605 (wt) 677 (Flag)
	mPkd1-Flag_2	CCCAGTCATGATGCTCTAGCC	
	mPkd1-Flag_1	CCACCTACAGCCAACCTTGGGA	440
	mPkd1-Flag_3	GTCCTTGTCATCGTCGTCCT	
	mPkd1-Flag_4	GACTACAAGGACGACGATGA	288
	mPkd1-Flag_2	CCCAGTCATGATGCTCTAGCC	
<i>Pkd1^{V5}</i>	mPkd1-V5_1	GAGCAACAACCTCCAGAGCCT	477 (wt) 591 (V5)
	mPkd1-V5_2	GCTGGGTACTCACTTGGTCC	
	mPkd1-V5_2	GCTGGGTACTCACTTGGTCC	381
	mPkd1-V5_3	GGTGGTGGCAAACCCATA	
<i>Pkd2</i>	mPkd2_1	TTAGTAAGCGCGTGTCCA	476
	mPkd2_2	ACTGAGGCAAACCTGCCAT	
<i>Pkd2^{-/-}</i>	mPkd2_3	TATGGCAGGTCCCTGTGG	12'895 (wt)
	mPkd2_2	ACTGAGGCAAACCTGCCAT	296 (-/-)
<i>Lama5</i>	mLama5_1	TGGAGGTAGACACACAGAGCAACC	788 (wt)
	mLama5_2	CCGTCCCCAAGTTGGAATTG	568 (deletion)
<i>Lama5^{GFP}</i>	mLama5-GFP_1	GCAGTGAGGGAGTTGTCACATTAGG	1'138
	mLama5-GFP_2	AACTTCAGGGTCAGCTTGCCGTAG	
	mLama5-GFP_3	AGACTGCCTTGGGAAAAGCG	1'041
	mLama5-GFP_4	CCTTGCCAATGCAGACGTTT	

Supplementary Table 4 - Genotyping of MDCK cell lines.

Madin-Darby Canine Kidney cell lines (MDCK)			
Feature	Name	Oligonucleotide	Product (bp)
<i>Pkd1</i>	cPkd1_1	TGGAGCTGTTAGGTGTCC	1'040
	cPkd1_2	CCACTGCCTGCCCTTCGA	
<i>Pkd1^{-/-}</i>	cPkd1_1	TGGAGCTGTTAGGTGTCC	30'323 (wt)
	cPkd1_3	CCCTGGAGGGCTCTCTGC	1'007 (-/-)
<i>Pkd2</i>	cPkd2_1	ACAGGAGTCAGAGTGCTG	861
	cPkd2_2	ACCTGTGTGCCTTACCCA	
<i>Pkd2^{-/-}</i>	cPkd2_3	ACAAAGGATGCTGTCCGG	57'725 (wt)
	cPkd2_2	ACCTGTGTGCCTTACCCA	532 (-/-)

Supplementary Table 5 - Oligonucleotides for RT-PCR.

Mouse Inner Medullary Collecting Duct 3 cell lines (mIMCD3)			
mRNA	Name	Oligonucleotide	Product (bp)
36b4	RT_m36b4_1	CCGATCTGCAGACACACACT	91
	RT_m36b4_2	ACCCTGAAGTGCTCGACATC	
Pkd1	RT_mPkd1_1	GTGGAAAGCAGGTCGGAAG	236
	RT_mPkd1_2	TCGTCTCGTTCAGCACCAG	
Pkd2	RT_mPkd2_1	GTGGATGTACACAAGTGAGAAGGAGC	454
	RT_mPkd2_2	CACGACAATCACAAATCCAGACA	
Madin-Darby Canine Kidney cell lines (MDCK)			
mRNA	Name	Oligonucleotide	Product (bp)
Gapdh	RT_cGapdh_1	CATGTTTGTGATGGGCGTGAACCA	100
	RT_cGapdh_2	TTTGGCTAGAGGAGCCAAGCAGTT	
Hprt1	RT_cHprt_1	TCCATTCCTATGACTGTAG	189
	RT_cHprt_1	ATTATGCTCCTTGACCAA	
Pkd1	RT_cPkd1_1	TTCTGCTGGTCTCCTCCTGT	270
	RT_cPkd1_2	GCAGAAAGAGCTCCACCATC	
Pkd2	RT_cPkd2_1	CCAGCCGAGAGAAGTATC	142
	RT_cPkd2_2	AAGAAGAGTTGTGACATTATCC	

Supplementary Table 6 - Polycystin-1^{Flag} nano-LC-MS/MS peptide data.

Mouse Inner Medullary Collecting Duct 3 (mIMCD3) <i>Pkd1</i>^{Flag}		
#	Unique PC1 Peptides	Position in PC1
1	WLQTLGPSLR	55 - 64
2	EHQVHVQSEATTCR	142 - 156
3	EAFLTAAEFSTQKLEEPAQMR	585 - 605
4	LEEPAQMR	598 - 605
5	LTPLLGLGPNPGLQHPGHYEVR	772 - 793
6	ATVGNSVSR	794 - 802
7	VLQGILVR	939 - 946
8	YSPMVEAGSDVAFR	947 - 960
9	SGIFPLALVLSSHVNK	1'346 - 1'361
10	VSGWNEVSR	1'521 - 1'529
11	TSMPSTTHTFAAPGLHLVR	1'759 - 1'777
12	VGDHLVNVQAENHVSHAQAQVR	1'939 - 1'960
13	VQGDSLVLISGR	2'009 - 2'020
14	FEAATSPSPR	2'075 - 2'084
15	NYLEAHVDLR	2'163 - 2'172
16	LVPIIEGGSYR	2'252 - 2'262
17	VWSDTQDLVLDGSK	2'263 - 2'276
18	GSSVVTIPLER	2'315 - 2'325
19	AQAVYEVSRR	2'371 - 2'379
20	DAEDGGAPLVYALLK	2'496 - 2'511
21	VLNNEPLTLAGEEIVALGK	2'763 - 2'781
22	VASMAFQTQTGTQIPIEQLAAER	2'843 - 2'865
23	ITYTVLNER	2'916 - 2'924
24	ISLEVLEGADHR	2'955 - 2'966
25	LLVAELQR	3'240 - 3'247