

Pkd1-Flox

品系全名	C57BL/6Smoc- <i>Pkd1</i> ^{em4(flox)Smoc}
目录号	NM-CKO-200058
品系状态	精子冻存

基因信息

基因名 Pkd1	基因曾用名	PC1; mFLJ00285
	NCBI ID	18763
	MGI ID	97603
	Ensembl ID	ENSMUSG00000032855
	人类同源基因	PKD1

品系描述

在Pkd1基因exon 2-4两侧分别插入loxP位点。该flox小鼠可与组织特异性Cre工具鼠交配，获得在特定细胞类型或组织中敲除Pkd1基因的小鼠模型。

应用领域：多囊肾病相关研究

*使用本品系发表的文献需注明: Pkd1-Flox mice (Cat. NO. NM-CKO-200058) were purchased from Shanghai Model Organisms Center, Inc..

疾病预测

多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:3617392 注：该品系与MMTV-cre工具鼠交配才可能获得预期表型
	参考文献	Piontek KB, Huso DL, Grinberg A, Liu L, Bedja D, Zhao H, Gabrielson K, Qian F, Mei C, Westphal H, Germino GG, A functional floxed allele of Pkd1 that can be conditionally inactivated in vivo. J Am Soc Nephrol. 2004 Dec;15(12):3035-43

多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:3795669 注：该品系与Pkd1-Flox(NM-CKO-200058)工具鼠交配才可能获得预期表型
	参考文献	Shibazaki S, Yu Z, Nishio S, Tian X, Thomson RB, Mitobe M, Louvi A, Velazquez H, Ishibe S, Cantley LG, Igarashi P, Somlo S, Cyst formation and activation of the extracellular regulated kinase pathway after kidney specific inactivation of Pkd1. Hum Mol Genet. 2008 Jun 1;17(11):1505-16
多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:3811282 注：该品系与Ggt1-cre工具鼠交配才可能获得预期表型
	参考文献	Starremans PG, Li X, Finnerty PE, Guo L, Takakura A, Neilson EG, Zhou J, A mouse model for polycystic kidney disease through a somatic in-frame deletion in the 5' end of Pkd1. Kidney Int. 2008 Jun;73(12):1394-405
多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:5430604 注：该品系与Nes-cre工具鼠交配才可能获得预期表型
	参考文献	Shillingford JM, Piontek KB, Germino GG, Weimbs T, Rapamycin ameliorates PKD resulting from conditional inactivation of Pkd1. J Am Soc Nephrol. 2010 Mar;21(3):489-97
多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:5502373 注：该品系与Col1a1-cre工具鼠交配才可能获得预期表型
	参考文献	Qiu N, Xiao Z, Cao L, David V, Quarles LD, Conditional mesenchymal disruption of pkd1 results in osteopenia and polycystic kidney disease. PLoS One. 2012;7(9):e46038
多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:6188648 注：该品系与Hoxb7-cre工具鼠交配才可能获得预期表型
	参考文献	Paul BM, Vassmer D, Taylor A, Magenheimer L, Carlton CG, Piontek KB, Germino GG, Vanden Heuvel GB, Ectopic expression of Cux1 is associated with reduced p27 expression and increased apoptosis during late stage cyst progression upon inactivation of Pkd1 in collecting ducts. Dev Dyn. 2011 Jun;240(6):1493-501

多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:6317327 注：该品系与Cdh16-cre工具鼠交配才可能获得预期表型
	参考文献	Hajarnis S, Lakhia R, Yheskel M, Williams D, Sorourian M, Liu X, Aboudehen K, Zhang S, Kersjes K, Galasso R, Li J, Kaimal V, Lockton S, Davis S, Flaten A, Johnson JA, Holland WL, Kusminski CM, Scherer PE, Harris PC, Trudel M, Wallace DP, Igarashi P, Lee EC, Androsavich JR, Patel V, microRNA-17 family promotes polycystic kidney disease progression through modulation of mitochondrial metabolism. Nat Commun. 2017 Feb 16;8:14395
多囊肾病1 Polycystic Kidney Disease 1	近似模型的表型	MGI:6317334 注：该品系与Cdh16-cre工具鼠交配才可能获得预期表型
	参考文献	Hajarnis S, Lakhia R, Yheskel M, Williams D, Sorourian M, Liu X, Aboudehen K, Zhang S, Kersjes K, Galasso R, Li J, Kaimal V, Lockton S, Davis S, Flaten A, Johnson JA, Holland WL, Kusminski CM, Scherer PE, Harris PC, Trudel M, Wallace DP, Igarashi P, Lee EC, Androsavich JR, Patel V, microRNA-17 family promotes polycystic kidney disease progression through modulation of mitochondrial metabolism. Nat Commun. 2017 Feb 16;8:14395

验证数据

暂无数据