

Stk11-Frox

品系全名	C57BL/6Smoc- <i>Stk11</i> ^{em1(frox)Smoc}
目录号	NM-CKO-200251
品系状态	胚胎冻存

基因信息

基因名 Stk11	基因曾用名	Lkb1; Par-4; R75140; AA408040
	NCBI ID	20869
	MGI ID	1341870
	Ensembl ID	ENSMUSG000000003068
	人类同源基因	STK11

品系描述

利用CRISPR基因编辑技术，在Stk11基因exon3-6两侧分别插入rox位点。该frox小鼠可与组织特异性Dre工具鼠交配，获得在特定细胞类型或组织中敲除Stk11基因的小鼠模型。

*使用本品系发表的文献需注明: Stk11-Frox mice (Cat. NO. NM-CKO-200251) were purchased from Shanghai Model Organisms Center, Inc..

疾病预测

Peutz-Jeghers 综合征 Peutz-Jeghers Syndrome	近似模型的表型	MGI:3814590 注：该品系与Pdx1-cre工具鼠交配才可能获得预期表型
	参考文献	Hezel AF, Gurumurthy S, Granot Z, Swisa A, Chu GC, Bailey G, Dor Y, Bardeesy N, Depinho RA, Pancreatic LKB1 deletion leads to acinar polarity defects and cystic neoplasms. Mol Cell Biol. 2008 Apr;28(7):2414-25

Peutz-Jeghers 综合征 Peutz-Jeghers Syndrome	近似模型的表型	MGI:3814722 注：该品系与KRT14-cre工具鼠交配才可能获得预期表型
	参考文献	Gurumurthy S, Hezel AF, Berger JH, Bosenberg MW, Bardeesy N, LKB1 deficiency sensitizes mice to carcinogen-induced tumorigenesis. Cancer Res. 2008 Jan 1;68(1):55-63
Peutz-Jeghers 综合征 Peutz-Jeghers Syndrome	近似模型的表型	MGI:5440238 注：该品系与Amhr2-Cre工具鼠交配才可能获得预期表型
	参考文献	Tanwar PS, Kaneko-Tarui T, Zhang L, Teixeira JM, Altered LKB1/AMPK/TSC1/TSC2/mTOR signaling causes disruption of Sertoli cell polarity and spermatogenesis. Hum Mol Genet. 2012 Oct 15;21(20):4394-405
膀胱癌 Urinary Bladder Cancer	近似模型的表型	MGI:5789953 注：该品系与Pten-Flox(NM-CKO-18004)和Cyp1a1-cre/ERT工具鼠交配才可能获得预期表型
	参考文献	Shorning BY, Griffiths D, Clarke AR, Lkb1 and Pten synergise to suppress mTOR-mediated tumorigenesis and epithelial-mesenchymal transition in the mouse bladder. PLoS One. 2011;6(1):e16209
皮肤黑色素瘤 Skin Melanoma	近似模型的表型	MGI:5752239 注：该品系与Cdkn2a-Flox(2)(NM-CKO-200151), Nras-Flox(NM-CKO-2100519)和Tyr-cre/ERT2工具鼠交配才可能获得预期表型
	参考文献	Burd CE, Liu W, Huynh MV, Waqas MA, Gillahan JE, Clark KS, Fu K, Martin BL, Jeck WR, Souroullas GP, Darr DB, Zedek DC, Miley MJ, Baguley BC, Campbell SL, Sharpless NE, Mutation-specific RAS oncogenicity explains NRAS codon 61 selection in melanoma. Cancer Discov. 2014 Dec;4(12):1418-29

子宫内膜癌 Endometrial Cancer	近似模型的表型	MGI:4438263 注：该品系与Sprr2f-cre工具鼠交配才可能获得预期表型
	参考文献	Contreras CM, Akbay EA, Gallardo TD, Haynie JM, Sharma S, Tagao O, Bardeesy N, Takahashi M, Settleman J, Wong KK, Castrillon DH, Lkb1 inactivation is sufficient to drive endometrial cancers that are aggressive yet highly responsive to mTOR inhibitor monotherapy. Dis Model Mech. 2010 Mar-Apr;3(3-4):181-93

验证数据

暂无数据