

Ctnnb1-Flox

品系全名	C57BL/6Smoc- <i>Ctnnb1</i> ^{em1(flox)Smoc}
目录号	NM-CKO-200154
品系状态	精子冻存

基因信息

基因名 Ctnnb1	基因曾用名	Bfc, Mesc, Catnb
	NCBI ID	12387
	MGI ID	88276
	Ensembl ID	ENSMUSG00000006932
	基因标记细胞类型举例	脾脏单核细胞、肾脏集合管瞬态细胞
	人类同源基因	CTNNB1
	人类同源基因关联疾病	卵巢癌、髓母细胞瘤

品系描述

通过Crispr/Cas9基因编辑技术，在Ctnnb1基因exon 2-6两侧分别插入loxP位点，建立Ctnnb1基因条件性敲除小鼠模型。

应用领域：心肌细胞肥大中的MicroRNA和CDK介导的磷酸化和Cdc6的去除相关研究

*使用本品系发表的文献需注明: Ctnnb1-Flox mice (Cat. NO. NM-CKO-200154) were purchased from Shanghai Model Organisms Center, Inc..

疾病预测

膀胱癌 Urinary Bladder Cancer	近似模型的表型	MGI:5790498 注：该品系与Cdkn1a-Flox(NM-CKO-200033)和Upk2-cre工具鼠交配才可能获得预期表型
	参考文献	Ahmad I, Patel R, Liu Y, Singh LB, Taketo MM, Wu XR, Leung HY, Sansom OJ, Ras mutation cooperates with beta-catenin activation to drive bladder tumourigenesis. Cell Death Dis. 2011;2:e124

膀胱癌 Urinary Bladder Cancer	近似模型的表型	MGI:5790500 注：该品系与Kras-LSL-G12D(NM-KI-190003)和Upk2-cre工具鼠交配才可能获得预期表型
	参考文献	Ahmad I, Patel R, Liu Y, Singh LB, Taketo MM, Wu XR, Leung HY, Sansom OJ, Ras mutation cooperates with beta-catenin activation to drive bladder tumourigenesis. Cell Death Dis. 2011;2:e124
肺癌 Lung Cancer	近似模型的表型	MGI:5141741 注：该品系与Fgfr3-Flox(NM-CKO-2101148)和Upk2-cre工具鼠交配才可能获得预期表型
	参考文献	Ahmad I, Singh LB, Foth M, Morris CA, Taketo MM, Wu XR, Leung HY, Sansom OJ, Iwata T, K-Ras and {beta}-catenin mutations cooperate with Fgfr3 mutations in mice to promote tumorigenesis in the skin and lung, but not in the bladder. Dis Model Mech. 2011 Jul-Aug;4(4):548-55
睾丸颗粒细胞瘤 Testicular Granulosa Cell Tumor	近似模型的表型	MGI:4941746 注：该品系与Pten-Flox(NM-CKO-18004)和Amhr2-Cre工具鼠交配才可能获得预期表型
	参考文献	Boyer A, Paquet M, Lague MN, Hermo L, Boerboom D, Dysregulation of WNT/CTNNB1 and PI3K/AKT signaling in testicular stromal cells causes granulosa cell tumor of the testis. Carcinogenesis. 2009 May;30(5):869-78
黑色素瘤 Melanoma	近似模型的表型	MGI:4418449 注：该品系与Cdkn2a-Flox(2)(NM-CKO-200151), Pten-Flox(NM-CKO-18004)和Tyr-cre/ERT2工具鼠交配才可能获得预期表型
	参考文献	Held MA, Curley DP, Dankort D, McMahon M, Muthusamy V, Bosenberg MW, Characterization of melanoma cells capable of propagating tumors from a single cell. Cancer Res. 2010 Jan 1;70(1):388-97
卵巢癌 Ovarian Cancer	近似模型的表型	MGI:5432223 注：该品系与CYP19A1-cre工具鼠交配才可能获得预期表型
	参考文献	Richards JS, Fan HY, Liu Z, Tsoi M, Lague MN, Boyer A, Boerboom D, Either Kras activation or Pten loss similarly enhance the dominant-stable CTNNB1-induced genetic program to promote granulosa cell tumor development in the ovary and testis. Oncogene. 2012 Mar 22;31(12):1504-20

卵巢癌 Ovarian Cancer	近似模型的表型	MGI:5432224 注：该品系与Kras-LSL-G12D(NM-KI-190003)和CYP19A1-cre工具鼠交配才可能获得预期表型
	参考文献	Richards JS, Fan HY, Liu Z, Tsoi M, Lague MN, Boyer A, Boerboom D, Either Kras activation or Pten loss similarly enhance the dominant-stable CTNNB1-induced genetic program to promote granulosa cell tumor development in the ovary and testis. Oncogene. 2012 Mar 22;31(12):1504-20
卵巢癌 Ovarian Cancer	近似模型的表型	MGI:5432226 注：该品系与Pten-Flox(NM-CKO-18004)和CYP19A1-cre工具鼠交配才可能获得预期表型
	参考文献	Richards JS, Fan HY, Liu Z, Tsoi M, Lague MN, Boyer A, Boerboom D, Either Kras activation or Pten loss similarly enhance the dominant-stable CTNNB1-induced genetic program to promote granulosa cell tumor development in the ovary and testis. Oncogene. 2012 Mar 22;31(12):1504-20
卵巢癌 Ovarian Cancer	近似模型的表型	MGI:5432228 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	Richards JS, Fan HY, Liu Z, Tsoi M, Lague MN, Boyer A, Boerboom D, Either Kras activation or Pten loss similarly enhance the dominant-stable CTNNB1-induced genetic program to promote granulosa cell tumor development in the ovary and testis. Oncogene. 2012 Mar 22;31(12):1504-20
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	参考文献	Richards JS, Fan HY, Liu Z, Tsoi M, Lague MN, Boyer A, Boerboom D, Either Kras activation or Pten loss similarly enhance the dominant-stable CTNNB1-induced genetic program to promote granulosa cell tumor development in the ovary and testis. Oncogene. 2012 Mar 22;31(12):1504-20

卵巢癌 Ovarian Cancer	近似模型的表型	MGI:5432232 注：该品系与Ctnnb1-Flox(NM-CKO-200154)和Amhr2-Cre工具鼠交配才可能获得预期表型
	参考文献	Richards JS, Fan HY, Liu Z, Tsoi M, Lague MN, Boyer A, Boerboom D, Either Kras activation or Pten loss similarly enhance the dominant-stable CTNNB1-induced genetic program to promote granulosa cell tumor development in the ovary and testis. Oncogene. 2012 Mar 22;31(12):1504-20
前列腺癌 Prostate Cancer	近似模型的表型	MGI:3836579 注：该品系与Pbsn-cre工具鼠交配才可能获得预期表型
	参考文献	Pearson HB, Phesse TJ, Clarke AR, K-ras and Wnt signaling synergize to accelerate prostate tumorigenesis in the mouse. Cancer Res. 2009 Jan 1;69(1):94-101
唾液腺癌 Salivary Gland Carcinoma	近似模型的表型	MGI:5508218 注：该品系与Bmpr1a-Flox(NM-CKO-2100038)和KRT14-cre工具鼠交配才可能获得预期表型
	参考文献	Wend P, Fang L, Zhu Q, Schipper JH, Loddenkemper C, Kosel F, Brinkmann V, Eckert K, Hindersin S, Holland JD, Lehr S, Kahn M, Ziebold U, Birchmeier W, Wnt/beta-catenin signalling induces MLL to create epigenetic changes in salivary gland tumours. EMBO J. 2013 Jul 17;32(14):1977-89
中耳炎 Otitis Media	近似模型的表型	MGI:3706580 注：该品系与CMV-cre工具鼠交配才可能获得预期表型
	参考文献	Schmidt-Ullrich R, Aebischer T, Hulsken J, Birchmeier W, Klemm U, Scheidereit C, Requirement of NF-kappaB/Rel for the development of hair follicles and other epidermal appendices. Development. 2001 Oct;128(19):3843-53
自闭症谱系障碍 Autism Spectrum Disorder	近似模型的表型	MGI:5812797 注：该品系与Pvalb-cre工具鼠交配才可能获得预期表型
	参考文献	Dong F, Jiang J, McSweeney C, Zou D, Liu L, Mao Y, Deletion of CTNNB1 in inhibitory circuitry contributes to autism-associated behavioral defects. Hum Mol Genet. 2016 Jul 1;25(13):2738-2751

验证数据

暂无数据