

# Tsc1-Flox

系統名	C57BL/6Smoc- <i>Tsc1</i> <sup>tm1(flox)Smoc</sup>
SMOC番号	NM-CKO-200231
維持形態	Repository Live

## 遺伝子の概要

Gene Symbol Tsc1	Synonyms	-
	NCBI ID	<a href="#">64930</a>
	MGI ID	<a href="#">1929183</a>
	Ensembl ID	<a href="#">ENSMUSG00000026812</a>
	Human Ortholog	TSC1

## 説明

These mice carry loxP sites flanking exon 17-18 of *Tsc1* gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of *Tsc1* gene.

**応用分野:** Research on mTOR signal transduction and respiratory electron transport, ATP synthesis produced by chemical permeation coupling, and heat produced by protein uncoupling  
 \*Literature published using this strain should indicate: *Tsc1-Flox* mice (Cat. NO. NM-CKO-200231) were purchased from Shanghai Model Organisms Center, Inc..

## 病気の予測

Tuberous Sclerosis	表現型	<a href="#">MGI:3802545</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with <i>Syn1-cre</i> mice.
	参考文献	Meikle L, Pollizzi K, Egnor A, Kramvis I, Lane H, Sahin M, Kwiatkowski DJ, Response of a neuronal model of tuberous sclerosis to mammalian target of rapamycin (mTOR) inhibitors: effects on mTORC1 and Akt signaling lead to improved survival and function. <i>J Neurosci</i> . 2008 May 21;28(21):5422-32

<b>Autism Spectrum Disorder</b>	<b>表現型</b>	<a href="#">MGI:5641483</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pcp2-cre mice.
	<b>参考文献</b>	Tsai PT, Hull C, Chu Y, Greene-Colozzi E, Sadowski AR, Leech JM, Steinberg J, Crawley JN, Regehr WG, Sahin M, Autistic-like behaviour and cerebellar dysfunction in Purkinje cell Tsc1 mutant mice. Nature. 2012 Aug 30;488(7413):647-51
<b>Tuberous Sclerosis</b>	<b>表現型</b>	<a href="#">MGI:3588988</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Myl2-Cre mice.
	<b>参考文献</b>	Meikle L, McMullen JR, Sherwood MC, Lader AS, Walker V, Chan JA, Kwiatkowski DJ, A mouse model of cardiac rhabdomyoma generated by loss of Tsc1 in ventricular myocytes. Hum Mol Genet. 2005 Feb 1;14(3):429-35
<b>Anterior Segment Dysgenesis</b>	<b>表現型</b>	<a href="#">MGI:6295837</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Lhx2-cre mice.
	<b>参考文献</b>	Hagglund AC, Jones I, Carlsson L, A novel mouse model of anterior segment dysgenesis (ASD): conditional deletion of Tsc1 disrupts ciliary body and iris development. Dis Model Mech. 2017 Mar 01;10(3):245-257
<b>Tuberous Sclerosis</b>	<b>表現型</b>	<a href="#">MGI:3802584</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with GFAP-cre mice.
	<b>参考文献</b>	Zeng LH, Ouyang Y, Gazit V, Cirrito JR, Jansen LA, Ess KC, Yamada KA, Wozniak DF, Holtzman DM, Gutmann DH, Wong M, Abnormal glutamate homeostasis and impaired synaptic plasticity and learning in a mouse model of tuberous sclerosis complex. Neurobiol Dis. 2007 Nov;28(2):184-96

## 表現型データ

No data

