

# Tsc2-Flox

<b>Nomenclature</b>	C57BL/6Smoc- <i>Tsc2</i> <sup>tm1(flox)Smoc</sup>
<b>Cat. NO.</b>	NM-CKO-2102032
<b>Strain State</b>	Sperm cryopreservation

## Gene Summary

<b>Gene Symbol</b> Tsc2	<b>Synonyms</b>	Tcs2, Nafld
	<b>NCBI ID</b>	<a href="#">22084</a>
	<b>MGI ID</b>	<a href="#">102548</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000002496</a>
	<b>Human Ortholog</b>	TSC2

## Model Description

These mice carry loxP sites flanking exon 3-5 of Tsc2 gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of Tsc2 gene.

\*Literature published using this strain should indicate: Tsc2-Flox mice (Cat. NO. NM-CKO-2102032) were purchased from Shanghai Model Organisms Center, Inc..

## Disease Connection

<b>Uterine Fibroid</b>	<b>Phenotype(s)</b>	<a href="#">MGI:5641710</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pgr-Cre mice.
	<b>Reference(s)</b>	Prizant H, Sen A, Light A, Cho SN, DeMayo FJ, Lydon JP, Hammes SR, Uterine-specific loss of Tsc2 leads to myometrial tumors in both the uterus and lungs. Mol Endocrinol. 2013 Sep;27(9):1403-14

<b>Tuberous Sclerosis</b>	<b>Phenotype(s)</b>	<a href="#">MGI:5140838</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pcp2-cre mice.
	<b>Reference(s)</b>	Reith RM, Way S, McKenna J 3rd, Haines K, Gambello MJ, Loss of the tuberous sclerosis complex protein tuberin causes Purkinje cell degeneration. Neurobiol Dis. 2011 Jul;43(1):113-22
<b>tuberous sclerosis</b>	<b>Phenotype(s)</b>	<a href="#">MGI:4880715</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with GFAP-cre mice.
	<b>Reference(s)</b>	Zeng LH, Rensing NR, Zhang B, Gutmann DH, Gambello MJ, Wong M, Tsc2 gene inactivation causes a more severe epilepsy phenotype than Tsc1 inactivation in a mouse model of Tuberous Sclerosis Complex. Hum Mol Genet. 2011 Feb 1;20(3):445-54

## Validation Data

No data