# Tsc2-Flox

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| **Nomenclature** | C57BL/6Smoc-*Tsc2*$^{tm1(flox)Smoc}$ |
| **Cat. NO.** | NM-CKO-2102032 |
| **Strain State** | Sperm cryopreservation |

## Gene Summary

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| **Gene Symbol**<br>**Tsc2** | **Synonyms** | Tcs2， Nafld |
| | **NCBI ID** | 22084 |
| | **MGI ID** | 102548 |
| | **Ensembl ID** | ENSMUSG00000002496 |
| | **Human Ortholog** | 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

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| **Uterine Fibroid** | **Phenotype(s)** | MGI:5641710<br>Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pgr-Cre mice. |
| | **Reference(s)** | 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 |

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| **Tuberous Sclerosis** | **Phenotype(s)** | MGI:5140838<br>Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pcp2-cre mice. |
| | **Reference(s)** | 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 |
| **tuberous sclerosis** | **Phenotype(s)** | MGI:4880715<br>Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with GFAP-cre mice. |
| | **Reference(s)** | 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