

Resource Summary Report

Generated by [PRECISE-TBI](#) on Jul 30, 2026

[Tg\(Gfap-cre\)1Sbk; Pten^{tm2Mak}/Pten^{tm2Mak}](#)

RRID:MGI:3714016

Type: Organism

Proper Citation

RRID:MGI:3714016

Organism Information

URL:

Proper Citation: RRID:MGI:3714016

Description: Allele Detail: Transgenic, Targeted This is a legacy resource.

Species: Mus musculus

Notes: Allele Detail: Transgenic, Targeted This is a legacy resource.

Phenotype: decreased hippocampus pyramidal cell number, increased brain size, megacephaly, abnormal spike wave discharge, abnormal Purkinje cell morphology, abnormal cerebellum morphology, abnormal cerebellar molecular layer, abnormal cerebellum external granule cell layer morphology, ataxia, hippocampal neuron degeneration, hydrocephaly, increased brain size, lethargy, abnormal dentate gyrus morphology, abnormal hippocampus morphology, abnormal cerebellar granule cell morphology, abnormal cerebellar foliation, decreased Purkinje cell number, increased hamartoma incidence, seizures, neuron hypertrophy, ataxia, premature death, gliosis, premature death, abnormal hippocampus pyramidal cell layer, tonic-clonic seizures, megacephaly

Affected Gene: Pten

Genomic Alteration: Tg(Gfap-cre)1Sbk, tm2Mak

Catalog Number: 3714016

Background: involves: 129P2/OlaHsd

Database: MGI, Mouse Genome Informatics MGI

Database Abbreviation: MGI

Availability: Availability unknown check source stock center

Source References: [PMID:19470613](#), [PMID:11726926](#)

Organism Name: Tg(Gfap-cre)1Sbk; Pten^{tm2Mak}/Pten^{tm2Mak}

Record Creation Time: 20240120T190517+0000

Record Last Update: 20240130T201940+0000

Ratings and Alerts

No rating or validation information has been found for Tg(Gfap-cre)1Sbk; Pten^{tm2Mak}/Pten^{tm2Mak}.

No alerts have been found for Tg(Gfap-cre)1Sbk; Pten^{tm2Mak}/Pten^{tm2Mak}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: MGI, Mouse Genome Informatics MGI

Usage and Citation Metrics

We found 6 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#).

Latchney SE, et al. (2025) Glial changes in the dentate gyrus of neuronal-specific PTEN knockout mice correlate with changes in cell proliferation. Journal of neuroimmunology, 404, 578604.

Latchney SE, et al. (2023) Neuronal deletion of phosphatase and tensin homolog in mice results in spatial dysregulation of adult hippocampal neurogenesis. Frontiers in molecular neuroscience, 16, 1308066.

Binder MS, et al. (2020) NS-Pten adult knockout mice display both quantitative and qualitative changes in urine-induced ultrasonic vocalizations. Behavioural brain research, 378, 112189.

Hodges SL, et al. (2018) Neuronal subset-specific deletion of Pten results in aberrant Wnt signaling and memory impairments. Brain research, 1699, 100.

Nguyen LH, et al. (2018) mTOR-dependent alterations of Kv1.1 subunit expression in the neuronal subset-specific Pten knockout mouse model of cortical dysplasia with epilepsy. Scientific reports, 8(1), 3568.

Binder MS, et al. (2017) NS-Pten knockout mice show sex- and age-specific differences in ultrasonic vocalizations. Brain and behavior, 7(11), e00857.