

Resource Summary Report

Generated by [NIF](#) on Aug 17, 2026

B6;129P2-*Pten*^{tm1Mak}/Mmjax

RRID:MMRRC_042059-JAX

Type: Organism

Proper Citation

RRID:MMRRC_042059-JAX

Organism Information

URL: https://www.mmrrc.org/catalog/sds.php?mmrrc_id=42059

Proper Citation: RRID:MMRRC_042059-JAX

Description: Mus musculus with name B6;129P2-*Pten*^{tm1Mak}/Mmjax from MMRRC.

Species: Mus musculus

Notes: Research areas: Cancer, Developmental Biology; Mutation Type: Targeted Mutation ; Collection:

Phenotype: abnormal brain development [MP:0000913]| open neural tube [MP:0000929]| abnormal somite development [MP:0001688]| decreased embryo size [MP:0001698]| abnormal placenta morphology [MP:0001711]| abnormal allantois morphology [MP:0001726]| increased mammary adenocarcinoma incidence [MP:0001883]| increased tumor incidence [MP:0002020]| increased T cell derived lymphoma incidence [MP:0002024]| increased leukemia incidence [MP:0002026]| increased adrenal gland tumor incidence [MP:0002031]| increased carcinoma incidence [MP:0002038]| increased skin papilloma incidence [MP:0002051]| abnormal developmental patterning [MP:0002084]| abnormal embryonic tissue morphology [MP:0002085]| abnormal seminiferous tubule morphology [MP:0002216]| colon polyps [MP:0003269]| kinked neural tube [MP:0003400]| embryonic growth retardation [MP:0003984]| disorganized embryonic tissue [MP:0003988]| failure of initiation of embryo turning [MP:0004180]| increased incidence of tumors by ionizing radiation induction [MP:0004500]| enlarged allantois [MP:0004556]| increased endometrial carcinoma incidence [MP:0004868]| enlarged Peyer's patches [MP:0008136]| endometrium hyperplasia [MP:0009092]| failure of chorioallantoic fusion [MP:0009657]| increased skin squamous cell carcinoma incidence [MP:0009704]| increased mammary gland tumor incidence [MP:0010299]| increased hamartoma incidence [MP:0010306]| increased prostate gland tumor incidence [MP:0010357]| increased fibroadenoma incidence [MP:0010364]| embryonic lethality during organogenesis [MP:0011098]| complete penetrance [MP:0011108]| embryonic lethality during organogenesis [MP:0012431]

Affected Gene: Pten

Catalog Number: 042059-JAX

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Source References: [PMID:9799734](#)

Alternate IDs: MMRRC_42059-JAX, MMRRC_042059, MMRRC_4259

Organism Name: B6;129P2-*Pten*^{tm1Mak}/Mmjax

Record Creation Time: 20230308T055222+0000

Record Last Update: 20260815T125146+0000

Ratings and Alerts

No rating or validation information has been found for B6;129P2-*Pten*^{tm1Mak}/Mmjax.

No alerts have been found for B6;129P2-*Pten*^{tm1Mak}/Mmjax.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Mutant Mouse Resource and Research Center (MMRRC)

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Fernandez A, et al. (2025) Altered Primary Somatosensory Neuron Development in a Pten Heterozygous Model for Autism Spectrum Disorder. Autism research : official journal of the International Society for Autism Research, 18(11), 2192.

Shen X, et al. (2025) The genetic duet of concurrent RASAL1 and PTEN alterations promotes cancer aggressiveness by cooperatively activating the PI3K-AKT pathway. Molecular oncology, 19(1), 248.