

# Resource Summary Report

Generated by [nidm-terms](#) on Aug 9, 2026

## STOCK Ptch1<sup>tm1Mps</sup>/J

RRID:IMSR\_JAX:003081

Type: Organism

### Proper Citation

RRID:IMSR\_JAX:003081

### Organism Information

**URL:** <https://www.jax.org/strain/003081>

**Proper Citation:** RRID:IMSR\_JAX:003081

**Description:** Mus musculus with name STOCK Ptch1<sup>tm1Mps</sup>/J from IMSR.

**Species:** Mus musculus

**Synonyms:** B6;129-Ptch1/J. B6;129-Ptch/J

**Notes:** gene symbol note: beta-galactosidase|patched 1; mutant stock: lacZ|Ptch1

**Affected Gene:** beta-galactosidase|patched 1

**Genomic Alteration:** targeted mutation 1; Matthew P Scott

**Catalog Number:** JAX:003081

**Database:** JAX Mice and Services

**Database Abbreviation:** JAX

**Availability:** sperm

**Organism Name:** STOCK Ptch1<sup>tm1Mps</sup>/J

**Record Creation Time:** 20250513T053637+0000

**Record Last Update:** 20260808T050838+0000

### Ratings and Alerts

No rating or validation information has been found for STOCK Ptch1<sup>tm1Mps</sup>/J.

No alerts have been found for STOCK Ptch1<sup>tm1Mps</sup>/J.

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## Data and Source Information

**Source:** [Integrated Animals](#)

**Source Database:** JAX Mice and Services

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## Usage and Citation Metrics

We found 19 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [nidm-terms](#) .

Abdelfattah N, et al. (2026) Male-biased Yap1-Cd276/B7-H3 axis for immune evasion in medulloblastoma. *Cancer cell*, 44(4), 760.

Gao J, et al. (2025) Single-cell transcriptomic sequencing identifies subcutaneous patient-derived xenograft recapitulated medulloblastoma. *Animal models and experimental medicine*, 8(3), 458.

Wang W, et al. (2025) Chromatin modification abnormalities by CHD7 and KMT2C loss promote medulloblastoma progression. *Cell reports*, 44(5), 115673.

Fan JJ, et al. (2025) A forward genetic screen identifies potassium channel essentiality in SHH medulloblastoma maintenance. *Developmental cell*, 60(11), 1532.

Shiraishi R, et al. (2024) Cancer-specific epigenome identifies oncogenic hijacking by nuclear factor I family proteins for medulloblastoma progression. *Developmental cell*, 59(17), 2302.

Yang F, et al. (2022) A Druggable UHRF1/DNMT1/GLI Complex Regulates Sonic Hedgehog-Dependent Tumor Growth. *Molecular cancer research : MCR*, 20(11), 1598.

Xie Y, et al. (2022) Astrocyte-neuron crosstalk through Hedgehog signaling mediates cortical synapse development. *Cell reports*, 38(8), 110416.

Ramachandran J, et al. (2022) Hedgehog regulation of epithelial cell state and morphogenesis in the larynx. *eLife*, 11.

George J, et al. (2022) Cancer stem cells, not bulk tumor cells, determine mechanisms of resistance to SMO inhibitors. *Cancer research communications*, 2(6), 402.

Luo W, et al. (2021) Single-cell spatial transcriptomic analysis reveals common and divergent features of developing postnatal granule cerebellar cells and medulloblastoma. *BMC biology*, 19(1), 135.

Fujii K, et al. (2021) Controlling tissue patterning by translational regulation of signaling transcripts through the core translation factor eIF3c. *Developmental cell*, 56(21), 2928.

Somatilaka BN, et al. (2020) Ankmy2 Prevents Smoothed-Independent Hyperactivation of the Hedgehog Pathway via Cilia-Regulated Adenylyl Cyclase Signaling. *Developmental cell*, 54(6), 710.

Yao M, et al. (2020) Astrocytic trans-Differentiation Completes a Multicellular Paracrine Feedback Loop Required for Medulloblastoma Tumor Growth. *Cell*, 180(3), 502.

Selvadurai HJ, et al. (2020) Medulloblastoma Arises from the Persistence of a Rare and Transient Sox2+ Granule Neuron Precursor. *Cell reports*, 31(2), 107511.

Zhu D, et al. (2018) BAI1 Suppresses Medulloblastoma Formation by Protecting p53 from Mdm2-Mediated Degradation. *Cancer cell*, 33(6), 1004.

Kopinke D, et al. (2017) Ciliary Hedgehog Signaling Restricts Injury-Induced Adipogenesis. *Cell*, 170(2), 340.

Brennan-Crispi DM, et al. (2015) Crosstalk between Desmoglein 2 and Patched 1 accelerates chemical-induced skin tumorigenesis. *Oncotarget*, 6(11), 8593.

Yang R, et al. (2015) Cell Division Mode Change Mediates the Regulation of Cerebellar Granule Neurogenesis Controlled by the Sonic Hedgehog Signaling. *Stem cell reports*, 5(5), 816.

Lastowska M, et al. (2013) Identification of a neuronal transcription factor network involved in medulloblastoma development. *Acta neuropathologica communications*, 1, 35.