

Resource Summary Report

Generated by PRECISE-TBI on Aug 1, 2026

B6.129S-Hcn1^{tm2Kndl}/J

RRID:IMSR_JAX:016566

Type: Organism

Proper Citation

RRID:IMSR_JAX:016566

Organism Information

URL: <https://www.jax.org/strain/016566>

Proper Citation: RRID:IMSR_JAX:016566

Description: Mus musculus with name B6.129S-Hcn1^{tm2Kndl}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: hyperpolarization activated cyclic nucleotide gated potassium channel 1; mutant strain|congenic strain: Hcn1

Affected Gene: hyperpolarization activated cyclic nucleotide gated potassium channel 1

Genomic Alteration: targeted mutation 2; Eric R Kandel

Catalog Number: JAX:016566

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6.129S-Hcn1^{tm2Kndl}/J

Record Creation Time: 20250513T053730+0000

Record Last Update: 20260801T050446+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S-Hcn1^{tm2Kndl}/J.

No alerts have been found for B6.129S-Hcn1^{tm2Kndl}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Merseburg A, et al. (2022) Seizures, behavioral deficits, and adverse drug responses in two new genetic mouse models of HCN1 epileptic encephalopathy. eLife, 11.

Liu Q, et al. (2017) Cyclophosphamide-induced HCN1 channel upregulation in interstitial Cajal-like cells leads to bladder hyperactivity in mice. Experimental & molecular medicine, 49(4), e319.

Kim YH, et al. (2013) Functional contributions of HCN channels in the primary auditory neurons of the mouse inner ear. The Journal of general physiology, 142(3), 207.

Borel M, et al. (2013) Frequency dependence of CA3 spike phase response arising from h-current properties. Frontiers in cellular neuroscience, 7, 263.