

Resource Summary Report

Generated by [NIF](#) on Sep 4, 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: 20260829T045028+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 [NIF](#) .

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.