

Resource Summary Report

Generated by T1D on Sep 20, 2026

B6;129-Sirt1^{tm1Ygu}/J

RRID:IMSR_JAX:008041

Type: Organism

Proper Citation

RRID:IMSR_JAX:008041

Organism Information

URL: <https://www.jax.org/strain/008041>

Proper Citation: RRID:IMSR_JAX:008041

Description: Mus musculus with name B6;129-Sirt1^{tm1Ygu}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: sirtuin 1; mutant stock: Sirt1

Affected Gene: sirtuin 1

Genomic Alteration: targeted mutation 1; Yansong Gu

Catalog Number: JAX:008041

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6;129-Sirt1^{tm1Ygu}/J

Record Creation Time: 20250513T053705+0000

Record Last Update: 20260919T054854+0000

Ratings and Alerts

No rating or validation information has been found for B6;129-Sirt1^{tm1Ygu}/J.

No alerts have been found for B6;129-Sirt1^{tm1Ygu}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 11 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#).

Kim HD, et al. (2025) Transcriptional Profiling of D1-MSNs Reveals SIRT1-Dependent and -Independent Responses to Chronic Social Defeat Stress. *bioRxiv : the preprint server for biology*.

Kim HD, et al. (2024) SIRT1 Coordinates Transcriptional Regulation of Neural Activity and Modulates Depression-Like Behaviors in the Nucleus Accumbens. *Biological psychiatry*, 96(6), 495.

Iwahara N, et al. (2022) Activation of SIRT1 promotes membrane resealing via cortactin. *Scientific reports*, 12(1), 15328.

Shtaiif B, et al. (2020) Cartilage -specific knockout of Sirt1 significantly reduces bone quality and catch-up growth efficiency. *Bone*, 138, 115468.

Xu M, et al. (2020) Epigenetic regulation of chondrocyte hypertrophy and apoptosis through Sirt1/P53/P21 pathway in surgery-induced osteoarthritis. *Biochemical and biophysical research communications*, 528(1), 179.

Fujiwara D, et al. (2019) SIRT1 deficiency interferes with membrane resealing after cell membrane injury. *PloS one*, 14(6), e0218329.

Prozorovski T, et al. (2019) Regulation of sirtuin expression in autoimmune neuroinflammation: Induction of SIRT1 in oligodendrocyte progenitor cells. *Neuroscience letters*, 704, 116.

Amano H, et al. (2019) Telomere Dysfunction Induces Sirtuin Repression that Drives Telomere-Dependent Disease. *Cell metabolism*, 29(6), 1274.

Tulino R, et al. (2016) SIRT1 Activity Is Linked to Its Brain Region-Specific Phosphorylation and Is Impaired in Huntington's Disease Mice. *PloS one*, 11(1), e0145425.

Hah YS, et al. (2014) Myeloid deletion of SIRT1 aggravates serum transfer arthritis in mice via nuclear factor- κ B activation. *PloS one*, 9(2), e87733.

Leko V, et al. (2013) Enterocyte-specific inactivation of SIRT1 reduces tumor load in the APC(+/-) mouse model. *PloS one*, 8(6), e66283.