Resource Summary Report

Generated by SPARC SAWG on Jul 28, 2026

B6.129-Ucp1^{tm1Kz}/J

RRID:IMSR_JAX:003124
Type: Organism

Proper Citation

RRID:IMSR_JAX:003124

Organism Information

URL: https://www.jax.org/strain/003124

Proper Citation: RRID:IMSR_JAX:003124

Description: Mus musculus with name B6.129-Ucp1^{tm1Kz}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: uncoupling protein 1 (mitochondrial; proton carrier); mutant strain|congenic strain: Ucp1

Affected Gene: uncoupling protein 1 (mitochondrial; proton carrier)

Genomic Alteration: targeted mutation 1; Leslie Kozak

Catalog Number: JAX:003124

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6.129-Ucp1^{tm1Kz}/J

Record Creation Time: 20250513T053637+0000

Record Last Update: 20260725T044346+0000

Ratings and Alerts

No rating or validation information has been found for B6.129-Ucp1^{tm1Kz}/J.

No alerts have been found for B6.129-Ucp1^{tm1Kz}/J.

Data and Source Information

Source: Integrated Animals

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 23 mentions in open access literature.

Listed below are recent publications. The full list is available at SPARC SAWG .

Jaschke NP, et al. (2025) Gut-to-brain signaling restricts dietary protein intake during recovery from catabolic states. Cell, 188(26), 7481.

Rahbani JF, et al. (2024) Parallel control of cold-triggered adipocyte thermogenesis by UCP1 and CKB. Cell metabolism, 36(3), 526.

Inoue SI, et al. (2024) Short-term cold exposure induces persistent epigenomic memory in brown fat. Cell metabolism, 36(8), 1764.

Mattar P, et al. (2024) Insulin and leptin oscillations license food-entrained browning and metabolic flexibility. Cell reports, 43(7), 114390.

Choi KM, et al. (2023) Regulation of beige adipocyte thermogenesis by the cold-repressed ER protein NNAT. Molecular metabolism, 69, 101679.

Cone AL, et al. (2023) Kappa opioid receptor activation increases thermogenic energy expenditure which drives increased feeding. iScience, 26(7), 107241.

Adachi Y, et al. (2022) Beiging of perivascular adipose tissue regulates its inflammation and vascular remodeling. Nature communications, 13(1), 5117.

Kasza I, et al. (2022) Contrasting recruitment of skin-associated adipose depots during cold challenge of mouse and human. The Journal of physiology, 600(4), 847.

Karlina R, et al. (2021) Identification and characterization of distinct brown adipocyte subtypes in C57BL/6J mice. Life science alliance, 4(1).

Gallardo-Montejano VI, et al. (2021) Perilipin 5 links mitochondrial uncoupled respiration in brown fat to healthy white fat remodeling and systemic glucose tolerance. Nature communications, 12(1), 3320.

Spiljar M, et al. (2021) Cold exposure protects from neuroinflammation through immunologic reprogramming. Cell metabolism, 33(11), 2231.

Paulo E, et al. (2021) Brown adipocyte ATF4 activation improves thermoregulation and systemic metabolism. Cell reports, 36(12), 109742.

Qing H, et al. (2020) Origin and Function of Stress-Induced IL-6 in Murine Models. Cell, 182(2), 372.

Bertholet AM, et al. (2019) H+ transport is an integral function of the mitochondrial ADP/ATP carrier. Nature, 571(7766), 515.

Kong X, et al. (2018) Brown Adipose Tissue Controls Skeletal Muscle Function via the Secretion of Myostatin. Cell metabolism, 28(4), 631.

Hagberg CE, et al. (2018) Flow Cytometry of Mouse and Human Adipocytes for the Analysis of Browning and Cellular Heterogeneity. Cell reports, 24(10), 2746.

Emmett MJ, et al. (2017) Histone deacetylase 3 prepares brown adipose tissue for acute thermogenic challenge. Nature, 546(7659), 544.

Schreiber R, et al. (2017) Cold-Induced Thermogenesis Depends on ATGL-Mediated Lipolysis in Cardiac Muscle, but Not Brown Adipose Tissue. Cell metabolism, 26(5), 753.

Bertholet AM, et al. (2017) Mitochondrial Patch Clamp of Beige Adipocytes Reveals UCP1-Positive and UCP1-Negative Cells Both Exhibiting Futile Creatine Cycling. Cell metabolism, 25(4), 811.

Keipert S, et al. (2017) Long-Term Cold Adaptation Does Not Require FGF21 or UCP1. Cell metabolism, 26(2), 437.