

# Resource Summary Report

Generated by [RRID](#) on Aug 3, 2026

## B6.129S4-Dnmt1<sup>tm2Jae</sup>/Mmucd

RRID:MMRRC\_014114-UCD

Type: Organism

### Proper Citation

RRID:MMRRC\_014114-UCD

### Organism Information

**URL:** [https://www.mmrrc.org/catalog/sds.php?mmrrc\\_id=14114](https://www.mmrrc.org/catalog/sds.php?mmrrc_id=14114)

**Proper Citation:** RRID:MMRRC\_014114-UCD

**Description:** Mus musculus with name B6.129S4-Dnmt1<sup>tm2Jae</sup>/Mmucd from MMRRC.

**Species:** Mus musculus

**Notes:** Research areas: Apoptosis, Cancer, Cell Biology, Developmental Biology, Hematology, Models for Human Disease, Neurobiology, Reproduction; Mutation Type: Targeted Mutation ; Collection:

**Phenotype:** anemia [MP:0001577]| abnormal B cell differentiation [MP:0002144]| decreased erythrocyte cell number [MP:0002875]| decreased pro-B cell number [MP:0008208]

**Affected Gene:** Dnmt1

**Catalog Number:** 014114-UCD

**Background:** Targeted Mutation

**Database:** Mutant Mouse Resource and Research Center (MMRRC)

**Database Abbreviation:** MMRRC

**Source References:** [PMID:11137995](#)

**Alternate IDs:** MMRRC\_14114-UCD, MMRRC\_014114, MMRRC\_14114

**Organism Name:** B6.129S4-Dnmt1<sup>tm2Jae</sup>/Mmucd

**Record Creation Time:** 20230308T054926+0000

**Record Last Update:** 20260801T123640+0000

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## Ratings and Alerts

No rating or validation information has been found for B6.129S4-*Dnmt1*<sup>tm2Jae</sup>/Mmucd.

No alerts have been found for B6.129S4-*Dnmt1*<sup>tm2Jae</sup>/Mmucd.

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## Data and Source Information

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

**Source Database:** Mutant Mouse Resource and Research Center (MMRRC)

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## Usage and Citation Metrics

We found 13 mentions in open access literature.

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

Wu R, et al. (2025) Epigenetic programming of estrogen receptor in adipocytes by high-fat diet regulates obesity-induced inflammation. JCI insight, 10(19).

Wu R, et al. (2025) Epigenetic Programming of Estrogen Receptor in Adipose Tissue by High Fat Diet Regulates Obesity-Induced Inflammation. bioRxiv : the preprint server for biology.

Ulschmid CM, et al. (2024) Disruption of DNA methylation-mediated cranial neural crest proliferation and differentiation causes orofacial clefts in mice. Proceedings of the National Academy of Sciences of the United States of America, 121(3), e2317668121.

Wang S, et al. (2023) Epigenetic Regulation of Hepatic Lipid Metabolism by DNA Methylation. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 10(20), e2206068.

Zhao J, et al. (2023) DNMT1 mediates the disturbed flow-induced endothelial to mesenchymal transition through disrupting  $\alpha$ -alanine and carnosine homeostasis. Theranostics, 13(13), 4392.

Dhillon P, et al. (2023) Increased levels of endogenous retroviruses trigger fibroinflammation and play a role in kidney disease development. Nature communications, 14(1), 559.

Wang J, et al. (2022) Matrix stiffness exacerbates the proinflammatory responses of vascular smooth muscle cell through the DDR1-DNMT1 mechanotransduction axis. Bioactive materials, 17, 406.

Li F, et al. (2021) Epigenetic interaction between UTX and DNMT1 regulates diet-induced myogenic remodeling in brown fat. Nature communications, 12(1), 6838.

Liu YF, et al. (2020) Hypermethylation of mitochondrial DNA in vascular smooth muscle cells impairs cell contractility. Cell death & disease, 11(1), 35.

Joseph DB, et al. (2019) Epithelial DNA methyltransferase-1 regulates cell survival, growth and maturation in developing prostatic buds. *Developmental biology*, 447(2), 157.

Tang RZ, et al. (2019) DNA methyltransferase 1 and Krüppel-like factor 4 axis regulates macrophage inflammation and atherosclerosis. *Journal of molecular and cellular cardiology*, 128, 11.

Moyon S, et al. (2017) Efficient Remyelination Requires DNA Methylation. *eNeuro*, 4(2).

Pathania R, et al. (2015) DNMT1 is essential for mammary and cancer stem cell maintenance and tumorigenesis. *Nature communications*, 6, 6910.