

Resource Summary Report

Generated by [NIF](#) on Sep 19, 2026

C57BL/6J-Rag1^{em10}Lutzy/J

RRID:IMSR_JAX:034159

Type: Organism

Proper Citation

RRID:IMSR_JAX:034159

Organism Information

URL: <https://www.jax.org/strain/034159>

Proper Citation: RRID:IMSR_JAX:034159

Description: Mus musculus with name C57BL/6J-Rag1^{em10}Lutzy/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: recombination activating 1; coisogenic strain|mutant strain: Rag1

Affected Gene: recombination activating 1

Genomic Alteration: endonuclease-mediated mutation 10; Cathy Lutz

Catalog Number: JAX:034159

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: C57BL/6J-Rag1^{em10}Lutzy/J

Record Creation Time: 20250513T053841+0000

Record Last Update: 20260919T055024+0000

Ratings and Alerts

No rating or validation information has been found for C57BL/6J-Rag1^{em10}Lutzy/J.

No alerts have been found for C57BL/6J-Rag1^{em10}Lutzy/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 41 mentions in open access literature.

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

Maltez VI, et al. (2026) Agonistic anti-CD40 antibody treatment converts resident regulatory T cells into activated type 1 effectors within the tumor microenvironment. *Immunity*, 59(4), 1058.

Qiao S, et al. (2026) Microbiota utilization of intestinal amino acids modulates cancer progression and anticancer immunity. *Cell host & microbe*, 34(1), 18.

Crotts SB, et al. (2026) ST8Sia6-dependent glycosylation restrains gut inflammation and pathogenic Th1 and Th17 programs. *Cell reports*, 45(5), 117347.

Schiele P, et al. (2025) CD8+ T cell-derived CD40L mediates noncanonical cytotoxicity in CD40-expressing cancer cells. *Science advances*, 11(21), eadr9331.

Fachi JL, et al. (2025) Fiber- and acetate-mediated modulation of MHC-II expression on intestinal epithelium protects from *Clostridioides difficile* infection. *Cell host & microbe*, 33(2), 235.

Li R, et al. (2025) Competition propels, rather than limits, the success of low-affinity B cells in the germinal center response. *Cell reports*, 44(2), 115334.

Lee KJ, et al. (2024) IL-7-primed bystander CD8 tumor-infiltrating lymphocytes optimize the antitumor efficacy of T cell engager immunotherapy. *Cell reports. Medicine*, 5(5), 101567.

Wang L, et al. (2024) Induction of immortal-like and functional CAR T cells by defined factors. *The Journal of experimental medicine*, 221(5).

Bauer KC, et al. (2024) The Gut Microbiome Controls Liver Tumors via the Vagus Nerve. *bioRxiv : the preprint server for biology*.

Liu J, et al. (2022) GPR174 knockdown enhances blood flow recovery in hindlimb ischemia mice model by upregulating AREG expression. *Nature communications*, 13(1), 7519.

Li S, et al. (2022) The transcription factor Bach2 negatively regulates murine natural killer cell maturation and function. *eLife*, 11.

Sandner L, et al. (2021) The Tyrosine Kinase Tec Regulates Effector Th17 Differentiation, Pathogenicity, and Plasticity in T-Cell-Driven Intestinal Inflammation. *Frontiers in*

immunology, 12, 750466.

Qi H, et al. (2020) Foxo3 Promotes the Differentiation and Function of Follicular Helper T Cells. *Cell reports*, 31(6), 107621.

Jayme TS, et al. (2020) Human interleukin-4-treated regulatory macrophages promote epithelial wound healing and reduce colitis in a mouse model. *Science advances*, 6(23), eaba4376.

Xu H, et al. (2020) The induction and function of the anti-inflammatory fate of TH17 cells. *Nature communications*, 11(1), 3334.

Garcia-Perez L, et al. (2020) Successful Preclinical Development of Gene Therapy for Recombinase-Activating Gene-1-Deficient SCID. *Molecular therapy. Methods & clinical development*, 17, 666.

Lv YP, et al. (2019) *Helicobacter pylori*-induced matrix metalloproteinase-10 promotes gastric bacterial colonization and gastritis. *Science advances*, 5(4), eaau6547.

Yamamoto A, et al. (2019) Systemic silencing of PHD2 causes reversible immune regulatory dysfunction. *The Journal of clinical investigation*, 129(9), 3640.

Crittenden S, et al. (2018) Purine metabolism controls innate lymphoid cell function and protects against intestinal injury. *Immunology and cell biology*, 96(10), 1049.

Ryzhakov G, et al. (2018) Alpha kinase 1 controls intestinal inflammation by suppressing the IL-12/Th1 axis. *Nature communications*, 9(1), 3797.