

Resource Summary Report

Generated by [RRID](#) on Jul 30, 2026

B6.129S4-Ccl2^{tm1Rol}/J

RRID:IMSR_JAX:004434

Type: Organism

Proper Citation

RRID:IMSR_JAX:004434

Organism Information

URL: <https://www.jax.org/strain/004434>

Proper Citation: RRID:IMSR_JAX:004434

Description: Mus musculus with name B6.129S4-Ccl2^{tm1Rol}/J from IMSR.

Species: Mus musculus

Synonyms: B6.129S4-Scya2. MCP-1 -/-

Notes: gene symbol note: C-C motif chemokine ligand 2; mutant strain|congenic strain: Ccl2

Affected Gene: C-C motif chemokine ligand 2

Genomic Alteration: targeted mutation 1; Barrett J Rollins

Catalog Number: JAX:004434

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S4-Ccl2^{tm1Rol}/J

Record Creation Time: 20250513T053644+0000

Record Last Update: 20260725T044354+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S4-Ccl2^{tm1Rol}/J.

No alerts have been found for B6.129S4-Ccl2^{tm1Rol}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 36 mentions in open access literature.

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

Young JS, et al. (2025) IL-6 underlies microenvironment immunosuppression and resistance to therapy in glioblastoma. *bioRxiv : the preprint server for biology*.

Ryu S, et al. (2024) Regulatory T cells require peripheral CCL2-CCR2 signaling to facilitate the resolution of medication overuse headache-related behavioral sensitization. *The journal of headache and pain*, 25(1), 197.

Theriot HM, et al. (2023) Pulmonary Expression of Interleukin-17 Contributes to Neutrophil Infiltration into the Lungs during Pneumonic Plague. *Infection and immunity*, 91(7), e0013123.

Yan L, et al. (2022) Alteration in Plasma Metabolome in High-Fat Diet-Fed Monocyte Chemotactic Protein-1 Knockout Mice Bearing Pulmonary Metastases of Lewis Lung Carcinoma. *Nutrition and metabolic insights*, 15, 1178638822111126.

Gutiérrez IL, et al. (2022) CCL2 Inhibition of Pro-Resolving Mediators Potentiates Neuroinflammation in Astrocytes. *International journal of molecular sciences*, 23(6).

Funatsu J, et al. (2022) Circulating inflammatory monocytes oppose microglia and contribute to cone cell death in retinitis pigmentosa. *PNAS nexus*, 1(1).

Bettke JA, et al. (2022) Inflammatory Monocytes Promote Granuloma-Mediated Control of Persistent Salmonella Infection. *Infection and immunity*, 90(4), e0007022.

Kurtz SL, et al. (2021) Deficiency in CCR2 increases susceptibility of mice to infection with an intracellular pathogen, *Francisella tularensis* LVS, but does not impair development of protective immunity. *PloS one*, 16(3), e0249142.

Badia A, et al. (2021) Transcriptomics analysis of Ccl2/Cx3cr1/Crb1rd8 deficient mice provides new insights into the pathophysiology of progressive retinal degeneration. *Experimental eye research*, 203, 108424.

Hohsfield LA, et al. (2021) Subventricular zone/white matter microglia reconstitute the empty adult microglial niche in a dynamic wave. *eLife*, 10.

Mittal P, et al. (2020) The CCR2/MCP-1 Chemokine Pathway and Lung Adenocarcinoma. *Cancers*, 12(12).

Giri J, et al. (2020) CCL2 and CXCL12 Derived from Mesenchymal Stromal Cells Cooperatively Polarize IL-10⁺ Tissue Macrophages to Mitigate Gut Injury. *Cell reports*, 30(6), 1923.

Cui J, et al. (2020) Inflammation of the Embryonic Choroid Plexus Barrier following Maternal Immune Activation. *Developmental cell*, 55(5), 617.

Vijayakumar S, et al. (2019) Spontaneous mutations of the *Zpld1* gene in mice cause semicircular canal dysfunction but do not impair gravity receptor or hearing functions. *Scientific reports*, 9(1), 12430.

McLaughlin PA, et al. (2019) Inflammatory monocytes provide a niche for *Salmonella* expansion in the lumen of the inflamed intestine. *PLoS pathogens*, 15(7), e1007847.

Chu SY, et al. (2019) Mechanical stretch induces hair regeneration through the alternative activation of macrophages. *Nature communications*, 10(1), 1524.

Zhang K, et al. (2018) Role of MCP-1 and CCR2 in ethanol-induced neuroinflammation and neurodegeneration in the developing brain. *Journal of neuroinflammation*, 15(1), 197.

Duan L, et al. (2018) PDGFR α Cells Rapidly Relay Inflammatory Signal from the Circulatory System to Neurons via Chemokine CCL2. *Neuron*, 100(1), 183.

Yan L, et al. (2017) Monocyte chemotactic protein-1 deficiency attenuates and high-fat diet exacerbates bone loss in mice with Lewis lung carcinoma. *Oncotarget*, 8(14), 23303.

Lee HK, et al. (2017) CCL2 deficient mesenchymal stem cells fail to establish long-lasting contact with T cells and no longer ameliorate lupus symptoms. *Scientific reports*, 7, 41258.