

Resource Summary Report

Generated by [ASWG](#) on Aug 25, 2026

B6.129S4-Itgam^{tm1Myd/J}

RRID:IMSR_JAX:003991

Type: Organism

Proper Citation

RRID:IMSR_JAX:003991

Organism Information

URL: <https://www.jax.org/strain/003991>

Proper Citation: RRID:IMSR_JAX:003991

Description: Mus musculus with name B6.129S4-Itgam^{tm1Myd/J} from IMSR.

Species: Mus musculus

Notes: gene symbol note: integrin alpha M; mutant strain|congenic strain: Itgam

Affected Gene: integrin alpha M

Genomic Alteration: targeted mutation 1; Tanya N Mayadas

Catalog Number: JAX:003991

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6.129S4-Itgam^{tm1Myd/J}

Record Creation Time: 20250513T053642+0000

Record Last Update: 20260815T050553+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S4-Itgam^{tm1Myd/J}.

No alerts have been found for B6.129S4-Itgam^{tm1Myd/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 [ASWG](#) .

Lin Y, et al. (2026) Integrin CD11b/CD18 reprograms macrophage polarization by suppressing ERK/STAT3 signaling to enhance antitumor immunity in colitis-associated colorectal cancer. *Journal for immunotherapy of cancer*, 14(6).

Ogaki A, et al. (2025) Chemokine-complement cascade in glial-vascular units protects neurons from non-biogenic nanoparticles. *Journal of neuroinflammation*, 22(1), 182.

Ghena N, et al. (2025) CD11c-Expressing Microglia Are Transient, Driven by Interactions With Apoptotic Cells. *Glia*, 73(5), 1077.

Passino R, et al. (2024) Neutrophil-inflicted vasculature damage suppresses immune-mediated optic nerve regeneration. *Cell reports*, 43(3), 113931.

Haist KC, et al. (2024) A LTB4/CD11b self-amplifying loop drives pyogranuloma formation in chronic granulomatous disease. *iScience*, 27(4), 109589.

Lawrence AR, et al. (2024) Microglia maintain structural integrity during fetal brain morphogenesis. *Cell*, 187(4), 962.

Rydström A, et al. (2023) MAC-1 marks a quiescent and functionally superior HSC subset during regeneration. *Stem cell reports*, 18(3), 736.

Roche V, et al. (2023) Carbohydrate ligand engagement with CD11b enhances differentiation of tumor-associated myeloid cells for immunotherapy of solid cancers. *Journal for immunotherapy of cancer*, 11(6).

Zhou J, et al. (2023) Microglial CD11b Knockout Contributes to Axonal Debris Clearance and Axonal Degradation Attenuation via IGF-1 After Acute Optic Nerve Injury. *Investigative ophthalmology & visual science*, 64(5), 7.

Li D, et al. (2023) ICAM-1-suPAR-CD11b Axis Is a Novel Therapeutic Target for Metastatic Triple-Negative Breast Cancer. *Cancers*, 15(10).

Anderson SR, et al. (2022) Neuronal apoptosis drives remodeling states of microglia and shifts in survival pathway dependence. *eLife*, 11.

Querrey M, et al. (2022) CD11b suppresses TLR activation of nonclassical monocytes to reduce primary graft dysfunction after lung transplantation. *The Journal of clinical investigation*, 132(14).

Roche V, et al. (2022) BG34-200 Immunotherapy of Advanced Melanoma. *Cancers*, 14(23).

Chen SH, et al. (2022) Activation of the MAC1-ERK1/2-NOX2 Pathway Is Required for LPS-Induced Sustaining Reactive Microgliosis, Chronic Neuroinflammation and Neurodegeneration. *Antioxidants* (Basel, Switzerland), 11(6).

Golshani M, et al. (2022) Filamentous Hemagglutinin of *Bordetella pertussis* Does Not Interact with the $\alpha 2$ Integrin CD11b/CD18. *International journal of molecular sciences*, 23(20).

Yang R, et al. (2022) Posttranslational S-nitrosylation modification regulates HMGB1 secretion and promotes its proinflammatory and neurodegenerative effects. *Cell reports*, 40(11), 111330.

Bednarczyk M, et al. (2021) Complement-Opsonized Nano-Carriers Are Bound by Dendritic Cells (DC) via Complement Receptor (CR)3, and by B Cell Subpopulations via CR-1/2, and Affect the Activation of DC and B-1 Cells. *International journal of molecular sciences*, 22(6).

Fu Y, et al. (2021) Intestinal CD11b⁺ B Cells Ameliorate Colitis by Secreting Immunoglobulin A. *Frontiers in immunology*, 12, 697725.

Tang Z, et al. (2021) Inflammatory macrophages exploit unconventional pro-phagocytic integrins for phagocytosis and anti-tumor immunity. *Cell reports*, 37(11), 110111.

Halder LD, et al. (2020) Immune modulation by complement receptor 3-dependent human monocyte TGF- β 1-transporting vesicles. *Nature communications*, 11(1), 2331.