

Resource Summary Report

Generated by [NIF](#) on Aug 16, 2026

B6;129-Itgb1^{tm1Efu}/J

RRID:IMSR_JAX:004605

Type: Organism

Proper Citation

RRID:IMSR_JAX:004605

Organism Information

URL: <https://www.jax.org/strain/004605>

Proper Citation: RRID:IMSR_JAX:004605

Description: Mus musculus with name B6;129-Itgb1^{tm1Efu}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: integrin beta 1 (fibronectin receptor beta); mutant stock: Itgb1

Affected Gene: integrin beta 1 (fibronectin receptor beta)

Genomic Alteration: targeted mutation 1; Elaine Fuchs

Catalog Number: JAX:004605

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6;129-Itgb1^{tm1Efu}/J

Record Creation Time: 20250513T053645+0000

Record Last Update: 20260815T050557+0000

Ratings and Alerts

No rating or validation information has been found for B6;129-Itgb1^{tm1Efu}/J.

No alerts have been found for B6;129-Itgb1^{tm1Efu}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 13 mentions in open access literature.

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

Petry P, et al. (2025) Early microglia progenitors colonize the embryonic CNS via integrin-mediated migration from the pial surface. *Developmental cell*.

Chen R, et al. (2024) Analyzing embryo dormancy at single-cell resolution reveals dynamic transcriptional responses and activation of integrin-Yap/Taz prosurvival signaling. *Cell stem cell*, 31(9), 1262.

Mironov A, et al. (2023) Rac1 controls cell turnover and reversibility of the involution process in postpartum mammary glands. *PLoS biology*, 21(1), e3001583.

Tixi W, et al. (2023) Coordination between ECM and cell-cell adhesion regulates the development of islet aggregation, architecture, and functional maturation. *eLife*, 12.

Kim YS, et al. (2022) Rap1 controls epiblast morphogenesis in sync with the pluripotency states transition. *Developmental cell*, 57(16), 1937.

Woon EP, et al. (2022) Medial orbitofrontal neurotrophin systems integrate hippocampal input into outcome-specific value representations. *Cell reports*, 40(11), 111334.

Shi L, et al. (2021) Treg cell-derived osteopontin promotes microglia-mediated white matter repair after ischemic stroke. *Immunity*, 54(7), 1527.

Ong T, et al. (2020) Siah2 integrates mitogenic and extracellular matrix signals linking neuronal progenitor ciliogenesis with germinal zone occupancy. *Nature communications*, 11(1), 5312.

Oguri Y, et al. (2020) CD81 Controls Beige Fat Progenitor Cell Growth and Energy Balance via FAK Signaling. *Cell*, 182(3), 563.

Peart J, et al. (2017) Critical role of $\alpha 1$ integrin in postnatal beta-cell function and expansion. *Oncotarget*, 8(38), 62939.

Saito K, et al. (2015) Interaction between fibronectin and $\alpha 1$ integrin is essential for tooth development. *PloS one*, 10(4), e0121667.

Pan L, et al. (2014) $\alpha 1$ -Integrin and integrin linked kinase regulate astrocytic differentiation of neural stem cells. *PloS one*, 9(8), e104335.

Ho E, et al. (2012) Epidermal growth factor induction of front-rear polarity and migration in keratinocytes is mediated by integrin-linked kinase and ELMO2. *Molecular biology of the*

cell, 23(3), 492.