

Resource Summary Report

Generated by [kravitz2](#) on Aug 10, 2026

129-Col4a3^{tm1Dec}/J

RRID:IMSR_JAX:002908

Type: Organism

Proper Citation

RRID:IMSR_JAX:002908

Organism Information

URL: <https://www.jax.org/strain/002908>

Proper Citation: RRID:IMSR_JAX:002908

Description: Mus musculus with name 129-Col4a3^{tm1Dec}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: collagen; type IV; alpha 3; mutant strain: Col4a3

Affected Gene: collagen; type IV; alpha 3

Genomic Alteration: targeted mutation 1; Dominic Cosgrove

Catalog Number: JAX:002908

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: 129-Col4a3^{tm1Dec}/J

Record Creation Time: 20250513T053635+0000

Record Last Update: 20260808T050837+0000

Ratings and Alerts

No rating or validation information has been found for 129-Col4a3^{tm1Dec}/J.

No alerts have been found for 129-Col4a3^{tm1Dec}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 10 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Zou A, et al. (2026) Deep Learning Enables Automated Segmentation and Quantification of Ultrastructure from Transmission Electron Microscopy Images. bioRxiv : the preprint server for biology.

Chatterjee T, et al. (2025) Myeloid FtH Regulates Macrophage Response to Kidney Injury by Modulating Snca and Ferroptosis. bioRxiv : the preprint server for biology.

Duara J, et al. (2024) Oxysterol-binding protein-like 7 deficiency leads to ER stress-mediated apoptosis in podocytes and proteinuria. American journal of physiology. Renal physiology, 327(3), F340.

Ge M, et al. (2023) Empagliflozin reduces podocyte lipotoxicity in experimental Alport syndrome. eLife, 12.

Kim JJ, et al. (2021) Discoidin domain receptor 1 activation links extracellular matrix to podocyte lipotoxicity in Alport syndrome. EBioMedicine, 63, 103162.

Nordlohne J, et al. (2021) A flow cytometry approach reveals heterogeneity in conventional subsets of murine renal mononuclear phagocytes. Scientific reports, 11(1), 13251.

Richter H, et al. (2019) DNA-Encoded Library-Derived DDR1 Inhibitor Prevents Fibrosis and Renal Function Loss in a Genetic Mouse Model of Alport Syndrome. ACS chemical biology, 14(1), 37.

Murata T, et al. (2016) COL4A6 is dispensable for autosomal recessive Alport syndrome. Scientific reports, 6, 29450.

Kim M, et al. (2015) Progression of Alport Kidney Disease in Col4a3 Knock Out Mice Is Independent of Sex or Macrophage Depletion by Clodronate Treatment. PloS one, 10(11), e0141231.

Steenhard BM, et al. (2012) Upregulated expression of integrin $\alpha 1$ in mesangial cells and integrin $\alpha 3$ and vimentin in podocytes of Col4a3-null (Alport) mice. PloS one, 7(12), e50745.