

Resource Summary Report

Generated by [kravitz2](#) on Jul 31, 2026

B6.Cg-Tg(Vil1-cre)997Gum/J

RRID:IMSR_JAX:004586

Type: Organism

Proper Citation

RRID:IMSR_JAX:004586

Organism Information

URL: <https://www.jax.org/strain/004586>

Proper Citation: RRID:IMSR_JAX:004586

Description: Mus musculus with name B6.Cg-Tg(Vil1-cre)997Gum/J from IMSR.

Species: Mus musculus

Synonyms: B6.SJL-Tg(Vil-cre)997Gum/J. B6.Cg-Tg(Vil-cre)997Gum/J. B6;SJL-Tg(Vil-cre)997Gum

Notes: gene symbol note: villin 1||transgene insertion 997; Deborah L Gumucio; mutant strain|congenic strain: Vil1||Tg(Vil1-cre)997Gum

Affected Gene: villin 1||transgene insertion 997; Deborah L Gumucio

Genomic Alteration: transgene insertion 997; Deborah L Gumucio

Catalog Number: JAX:004586

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.Cg-Tg(Vil1-cre)997Gum/J

Record Creation Time: 20250513T053645+0000

Record Last Update: 20260725T044355+0000

Ratings and Alerts

No rating or validation information has been found for B6.Cg-Tg(Vil1-cre)997Gum/J.

Warning: Warning. Researchers have noted that this genotype does not sufficiently model human hemochromatosis type 1.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 186 mentions in open access literature.

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

Hai S, et al. (2025) Intestinal IL-33 promotes microbiota-derived trimethylamine N -oxide synthesis and drives metabolic dysfunction-associated steatotic liver disease progression by exerting dual regulation on HIF-1??. Hepatology (Baltimore, Md.), 82(1), 184.

Xu C, et al. (2025) FTO facilitates colorectal cancer chemoresistance via regulation of NUPR1-dependent iron homeostasis. Redox biology, 83, 103647.

Luo R, et al. (2025) TLR4 interaction with PIEZO1 facilitates the 5-HT-mediated intestinal motility dysfunction in offspring mice induced by LPS exposure during pregnancy. Genes & diseases, 12(5), 101707.

Wang Y, et al. (2025) Nonsense-mediated mRNA decay inhibits TRAF6-dependent anti-tumor immunity in colorectal cancer. Cell reports. Medicine, 6(12), 102463.

Xu Z, et al. (2025) Deficiency of Epithelial PIEZO1 Alleviates Liver Steatosis Induced by High-Fat Diet in Mice. International journal of biological sciences, 21(2), 745.

Das S, et al. (2025) Liver X receptor unlinks intestinal regeneration and tumorigenesis. Nature, 637(8048), 1198.

Iguchi E, et al. (2025) Epithelial Regnase-1 inhibits colorectal tumor growth by regulating IL-17 signaling via degradation of NFkBIZ mRNA. Proceedings of the National Academy of Sciences of the United States of America, 122(23), e2500820122.

Zhang X, et al. (2025) Intestinal TM6SF2 protects against metabolic dysfunction-associated steatohepatitis through the gut-liver axis. Nature metabolism, 7(1), 102.

Chen X, et al. (2025) FFAR4-mediated IL-6 release from islet macrophages promotes insulin secretion and is compromised in type-2 diabetes. Nature communications, 16(1), 3422.

Kriukova E, et al. (2025) Probing Field Cancerization in the Gastrointestinal Tract Using a Hybrid Raman and Partial Wave Spectroscopy Microscope. Analytical chemistry, 97(24),

12642.

Tian Q, et al. (2025) Intestinal IL-22RA1 signaling regulates Chlamydia deficient in plasmid-encoded pGP3 spreading to large intestine. *Frontiers in microbiology*, 16, 1647731.

Hao W, et al. (2025) Intestinal epithelial Dicer1 regulates gut microbiome and Alzheimer's pathology in App-knock-in mice. *Alzheimer's research & therapy*, 17(1), 202.

Herrmann C, et al. (2025) Environmental stress drives clearance of a persistent enteric virus in mice. *Nature microbiology*, 10(8), 1975.

Kaya GG, et al. (2025) Unfolded protein response transcription factor XBP1 suppresses necroptosis-induced colitis by reinforcing the mucus barrier. *Immunity*, 58(9), 2208.

Mears KS, et al. (2025) Therapeutic activation of IL-22-producing innate lymphoid cells enhances host defenses to *Clostridioides difficile* infection. *Cell reports*, 44(4), 115438.

Ramirez Reyes B, et al. (2025) Homeostatic antiviral protection of the neonatal gut epithelium by interferon lambda. *Cell reports*, 44(2), 115243.

Bernardo E, et al. (2025) HNF1A and A1CF coordinate a beta cell transcription-splicing axis that is disrupted in type 2 diabetes. *Cell metabolism*, 37(9), 1870.

Yuan Y, et al. (2025) Reduction of intestinal RIPK1 ameliorates HFD-induced metabolic disorders in female mice. *iScience*, 28(2), 111906.

Bowen CM, et al. (2025) Inhibition of histone methyltransferase EZH2 for immune interception of colorectal cancer in Lynch syndrome. *JCI insight*, 10(6).

Mahmoud W, et al. (2025) Differential expression of villin and advillin by neuroendocrine and tuft cells in the murine lower airways. *Cell and tissue research*.