

Resource Summary Report

Generated by PRECISE-TBI on Aug 1, 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: 20260801T050348+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 [PRECISE-TBI](#).

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.

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

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.

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.

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

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

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*.