

# Resource Summary Report

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## 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.

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## Data and Source Information

**Source:** [Integrated Animals](#)

**Source Database:** JAX Mice and Services

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## Usage and Citation Metrics

We found 186 mentions in open access literature.

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

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.

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.

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.

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.

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.

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

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.

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

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.

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*.

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