Resource Summary Report

Generated by NIF on Sep 13, 2026

M51 Super 8x FOPFlash (TOPFlash mutant)

RRID:Addgene_12457
Type: Plasmid

Proper Citation

RRID:Addgene_12457

Plasmid Information

URL: http://www.addgene.org/12457

Proper Citation: RRID:Addgene_12457

Insert Name: mutant TCF/LEF binding sites

Bacterial Resistance: Ampicillin

Defining Citation: PMID:12699626

Vector Backbone Description: Backbone Marker:Promega; Backbone Size:4839; Vector Backbone:pGL3; Vector Types:Mammalian Expression, Luciferase; Bacterial Resistance:Ampicillin

Comments: This is a CONTROL luciferase reporter with the TCF/LEF sites of Super8XTOPflash (construct M50, Addgene Plasmid #12456) being mutated. There are 6 mutated TCF/LEF binding sites that were cloned into the pGL3 vector (Promega), which contains a minimal promoter followed by a firefly luciferase open reading frame. This 134bp fragment was gene synthesized and cloned into the ASP718 and XMA-1 sites of the vector. Note: This plasmid was published as M51 Super 8x FOPFlash, but the plasmid actually contains 6 TCF/LEF sites.

Plasmid Name: M51 Super 8x FOPFlash (TOPFlash mutant)

Relevant Mutation: mutant TCF/LEF binding sites

Record Creation Time: 20220422T221653+0000

Record Last Update: 20260912T091725+0000

Ratings and Alerts

No rating or validation information has been found for M51 Super 8x FOPFlash (TOPFlash mutant).

No alerts have been found for M51 Super 8x FOPFlash (TOPFlash mutant).

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 220 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF .

Lu T, et al. (2026) PUMILIO proteins maintain lineage balance via post-transcriptional repression of germline fate and promotion of somatic differentiation. Cell reports, 45(7), 117682.

Chocarro-Calvo A, et al. (2025) Fatty acid uptake activates an AXL-CAV1-?-catenin axis to drive melanoma progression. Genes & development, 39(7-8), 463.

Ding M, et al. (2025) Therapeutic targeting de novo purine biosynthesis driven by ?-catenin-dependent PPAT upregulation in hepatoblastoma. Cell death & disease, 16(1), 179.

Bhat S, et al. (2025) De novo design of peptide binders to conformationally diverse targets with contrastive language modeling. Science advances, 11(4), eadr8638.

Wu Q, et al. (2025) The miR-34/449 clusters regulate the differentiation of ciliated cells in the oviduct via the Wnt/?-catenin signaling pathway. Cell & bioscience, 15(1), 130.

Corr BR, et al. (2025) SM08502-Mediated ?-Catenin Repression Synergizes with Olaparib to Inhibit Tumor Progression. Cancer research communications, 5(12), 2112.

Jhe YL, et al. (2025) PKA-Mediated Phosphorylation of SFRP4 Promotes Wnt/?-Catenin Activation and Cancer Stemness in Gastric Cancer. International journal of molecular sciences, 26(12).

Ishii Y, et al. (2025) Compound screening in human airway basal cells identifies Wnt pathway activators as potential pro-regenerative therapies. Journal of cell science, 138(7).

Hu H, et al. (2025) OH2 oncolytic virus inhibits non-small-cell lung cancer metastasis via ?-catenin pathway suppression. Communications biology, 8(1), 1115.

Yang R, et al. (2025) DKK3-LRP1 complex and a chemical inhibitor regulate A? clearance in models of Alzheimer's disease. Science advances, 11(45), eadz2099.

Nakayama M, et al. (2025) Missense Mutant p53 Transactivates Wnt/?-Catenin Signaling in Neighboring p53-Destabilized Cells through the COX-2/PGE2 Pathway. Cancer

research communications, 5(1), 13.

Xu X, et al. (2025) Endometrial stromal Menin supports endometrial receptivity by maintaining homeostasis of WNT signaling pathway through H3K4me3 during WOI. Communications biology, 8(1), 995.

Saikia M, et al. (2025) Blocking the functional domain of cancer cell surface TIP1 upregulates Midkine via the ?-catenin/Wnt signaling pathway. Cancer gene therapy, 32(7), 785.

Li F, et al. (2024) Blocking methionine catabolism induces senescence and confers vulnerability to GSK3 inhibition in liver cancer. Nature cancer, 5(1), 131.

Papoutsoglou P, et al. (2024) TGF?-induced long non-coding RNA LINC00313 activates Wnt signaling and promotes cholangiocarcinoma. EMBO reports, 25(3), 1022.

Kundu P, et al. (2024) DNA Methylation in Recurrent Glioblastomas: Increased TEM8 Expression Activates the Src/PI3K/AKT/GSK-3?/B-Catenin Pathway. Cancer genomics & proteomics, 21(5), 485.

Leung YK, et al. (2024) The Loss of an Orphan Nuclear Receptor NR2E3 Augments Wnt/?-catenin Signaling via Epigenetic Dysregulation that Enhances Sp1-? catenin-p300 Interactions in Hepatocellular Carcinoma. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(29), e2308539.

Vu JT, et al. (2024) A genome-wide screen links peroxisome regulation with Wnt signaling through RNF146 and tankyrase. bioRxiv : the preprint server for biology.

Nelson AL, et al. (2024) ?-catenin mRNA encapsulated in SM-102 lipid nanoparticles enhances bone formation in a murine tibia fracture repair model. Bioactive materials, 39, 273.

Jia X, et al. (2024) Methylation-modulated PFTK1 regulates gefitinib resistance via Wnt/?-catenin signaling in EGFR mutant non-small-cell lung cancer cells. Communications biology, 7(1), 1649.