

Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Mar 30, 2025

M50 Super 8x TOPFlash

RRID:Addgene_12456

Type: Plasmid

Proper Citation

RRID:Addgene_12456

Plasmid Information

URL: <http://www.addgene.org/12456>

Proper Citation: RRID:Addgene_12456

Insert Name: TCF/LEF binding sites

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:12699626](https://pubmed.ncbi.nlm.nih.gov/12699626/)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:4871; Vector Backbone:pTA-Luc; Vector Types:Luciferase; Bacterial Resistance:Ampicillin

Comments: This is a luciferase reporter of beta-catenin-mediated transcriptional activation. In HEK cells, maximal activation of this reporter is ~100-fold (activation by Wnt) up to ~1,000-fold (activation by phosphorylation mutants of beta-catenin). The appropriate control plasmid is clone M51, Super8XFOPflash, which has mutant TCF/LEF binding sites. This construct was made by Ajamete Kaykas in the Moon lab. The backbone is the pTA-Luc vector of Clontech, which provides a minimal TA viral promoter driving expression of the firefly luciferase gene (see company publications for details). 7 TCF/LEF binding sites were cloned into the Mlu1 site of this vector (7 copies of: AGATCAAAGGgggta, with TCF/LEF binding site in CAP letters, and a spacer in lower case, separating each copy of the TCF/LEF site). Note: This plasmid was published as M50 Super 8x TOPFlash, but the plasmid actually contains 7 TCF/LEF sites.

Plasmid Name: M50 Super 8x TOPFlash

Record Creation Time: 20220422T221653+0000

Record Last Update: 20220422T222201+0000

Ratings and Alerts

No rating or validation information has been found for M50 Super 8x TOPFlash.

No alerts have been found for M50 Super 8x TOPFlash.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 83 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Bruguera ES, et al. (2025) The co-receptor Tetraspanin12 directly captures Norrin to promote ligand-specific β -catenin signaling. *eLife*, 13.

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

Gorji-Bahri G, et al. (2024) Stromal cartilage oligomeric matrix protein as a tumorigenic driver in ovarian cancer via Notch3 signaling and epithelial-to-mesenchymal transition. *Journal of translational medicine*, 22(1), 351.

Wu T, et al. (2024) TRIM59 is required for mouse GC-1 cell maintenance through modulating the ubiquitination of AXIN1. *Heliyon*, 10(17), e36744.

Alasaadi DN, et al. (2024) Competence for neural crest induction is controlled by hydrostatic pressure through Yap. *Nature cell biology*, 26(4), 530.

Gan X, et al. (2024) Identification of zinc finger MIZ-type containing 2 as an oncoprotein enhancing NAD-dependent protein deacetylase sirtuin-1 deacetylase activity to regulate Wnt and Hippo pathways in non-small-cell lung cancer. *Cellular & molecular biology letters*, 29(1), 122.

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

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

Mediratta K, et al. (2024) Targeting CD73 with flavonoids inhibits cancer stem cells and

increases lymphocyte infiltration in a triple-negative breast cancer mouse model. *Frontiers in immunology*, 15, 1366197.

Yu J, et al. (2024) Programmable RNA base editing with photoactivatable CRISPR-Cas13. *Nature communications*, 15(1), 673.

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

Qin Y, et al. (2024) Long non-coding RNA Malat1 fine-tunes bone homeostasis and repair by orchestrating cellular crosstalk and β -catenin-OPG/Jagged1 pathway. *eLife*, 13.

Chocarro-Calvo A, et al. (2024) Phenotype-specific melanoma uptake of fatty acid from human adipocytes activates AXL and CAV1-dependent β -catenin nuclear accumulation. *bioRxiv : the preprint server for biology*.

de Nys R, et al. (2024) Proteomic analysis of the developing mammalian brain links PCDH19 to the Wnt/ β -catenin signalling pathway. *Molecular psychiatry*, 29(7), 2199.

Bhat S, et al. (2024) De Novo Design of Peptide Binders to Conformationally Diverse Targets with Contrastive Language Modeling. *bioRxiv : the preprint server for biology*.

Park S, et al. (2024) In vitro hair growth-promoting effects of araliadiol via the p38/PPAR- γ signaling pathway in human hair follicle stem cells and dermal papilla cells. *Frontiers in pharmacology*, 15, 1482898.

Seltmann K, et al. (2024) Transport of CLCA2 to the nucleus by extracellular vesicles controls keratinocyte survival and migration. *Journal of extracellular vesicles*, 13(4), e12430.

Park S, et al. (2024) Phloroglucinol Enhances Anagen Signaling and Alleviates H₂O₂-Induced Oxidative Stress in Human Dermal Papilla Cells. *Journal of microbiology and biotechnology*, 34(4), 812.

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*.

Bruguera ES, et al. (2024) The co-receptor Tspan12 directly captures Norrin to promote ligand-specific β -catenin signaling. *bioRxiv : the preprint server for biology*.