Resource Summary Report

Generated by NIF on Aug 14, 2026

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

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: 20260808T080646+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 425 mentions in open access literature.

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

Torborg SR, et al. (2026) Disruption of WNT/Notch signaling in pancreatic cancer reveals tumors depend on the intricate equilibrium of malignant cell states. Developmental cell, 61(5), 1012.

Xue L, et al. (2026) Structural basis of the interaction between Norrin-Tspan12. Structure (London, England : 1993), 34(7), 1050.

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.

Maruna M, et al. (2025) RNA trans-splicing to rescue ?-catenin: A novel approach for treating CTNNB1-Haploinsufficiency disorder. Molecular therapy. Nucleic acids, 36(3), 102680.

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.

Bagger SM, et al. (2025) Complex G-protein signaling of the adhesion GPCR, ADGRA3. The Journal of biological chemistry, 301(5), 108441.

Monfries C, et al. (2025) frizzled 5 mutant zebrafish are genetically sensitised to developing microphthalmia and coloboma. Disease models & mechanisms, 18(6).

Voss JH, et al. (2025) WNT-induced association of Frizzled and LRP6 is not sufficient for the initiation of WNT/?-catenin signaling. Nature communications, 16(1), 4848.

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.

Tader BR, et al. (2025) Nuclear VAV1 increases GLI1-dependent transcription in pancreatic cancer cells. The Journal of biological chemistry, 302(1), 110988.

Peng Y, et al. (2025) Structural insights into Wnt/?-catenin signaling regulation by LGR4, R-spondin, and ZNRF3. Nature communications, 16(1), 8337.

Wang JM, et al. (2025) KIF26B promotes bladder cancer progression via activating Wnt/?-catenin signaling in a TRAF2-dependent pathway. Cell reports, 44(5), 115595.

Wesslowski J, et al. (2025) Quantification of Wnt3a, Wnt5a and Wnt16 Binding to Multiple Frizzleds Under Physiological Conditions Using NanoBit/BRET. Cells, 14(11).

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.

Rolver MG, et al. (2025) Tumor microenvironment acidosis favors pancreatic cancer stem cell properties and in vivo metastasis. iScience, 28(3), 111956.

Xia JB, et al. (2025) FoxO3 controls cardiomyocyte proliferation and heart regeneration by regulating Sfrp2 expression in postnatal mice. Nature communications, 16(1), 2532.

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).

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).

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