

Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

4xCSL-luciferase

RRID:Addgene_41726

Type: Plasmid

Proper Citation

RRID:Addgene_41726

Plasmid Information

URL: <http://www.addgene.org/41726>

Proper Citation: RRID:Addgene_41726

Insert Name: 4xCSL binding sites

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:11518718](#)

Vector Backbone Description: Backbone Marker:Dr. D. Towler (Washington University, St. Louis); Vector Backbone:RSV-TATA pGL2; Vector Types:Mammalian Expression, Luciferase; Bacterial Resistance:Ampicillin

Comments: The 4xCSL-luciferase reporter was constructed from the CBF1/pGL2-GLO TATA CAT plasmid, a gift from Dr. S. Speck. A fragment containing the multimerized high affinity CSL sites (4× CGTGGGAA) was excised by BamHI digest and ligated into a BglII/BamHI-digested RSV-TATA pGL2 vector, a gift from Dr. D. Towler. This modified vector has a TATA box from Rous sarcoma virus inserted into the pGL2-basic vector (Promega) to reduce the basal luciferase activity. Construct was sequenced for verification. Alternate plasmid name: 4xCBS-luciferase

Plasmid Name: 4xCSL-luciferase

Relevant Mutation: Contains a multimerized high affinity CSL binding site (4 x CGTGGGAA)

Record Creation Time: 20220422T222216+0000

Record Last Update: 20260815T081448+0000

Ratings and Alerts

No rating or validation information has been found for 4xCSL-luciferase.

No alerts have been found for 4xCSL-luciferase.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 24 mentions in open access literature.

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

Zhao X, et al. (2026) Selective vulnerability of cerebral vasculature to NOTCH3 variants in small vessel disease and rescue by phosphodiesterase-5 inhibitor. Science advances, 12(14), eaeb1134.

Mosialou I, et al. (2025) A niche driven mechanism determines response and a mutation-independent therapeutic approach for myeloid malignancies. Cancer cell, 43(6), 1007.

Militi S, et al. (2023) RBL2-E2F-GCN5 guide cell fate decisions during tissue specification by regulating cell-cycle-dependent fluctuations of non-cell-autonomous signaling. Cell reports, 42(9), 113146.

Nomura T, et al. (2022) Temperature sensitivity of Notch signaling underlies species-specific developmental plasticity and robustness in amniote brains. Nature communications, 13(1), 96.

Gutiérrez J, et al. (2021) Reduced RECK levels accelerate skeletal muscle differentiation, improve muscle regeneration, and decrease fibrosis. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 35(5), e21503.

Silva G, et al. (2021) Development of DI1.72, a Novel Anti-DLL1 Antibody with Anti-Tumor Efficacy against Estrogen Receptor-Positive Breast Cancer. Cancers, 13(16).

Siddharth S, et al. (2021) Concomitant activation of GLI1 and Notch1 contributes to racial disparity of human triple negative breast cancer progression. eLife, 10.

Kang M, et al. (2020) Quadrella incana (Capparaceae) Leaf Extract Enhances Proliferation and Maintenance of Neural Stem/Progenitor Cells through Upregulating Glycolytic Flux and Redox Potential. Oxidative medicine and cellular longevity, 2020, 5963037.

Tamir TY, et al. (2020) Gain-of-function genetic screen of the kinome reveals BRSK2 as an inhibitor of the NRF2 transcription factor. Journal of cell science, 133(14).

Lake RJ, et al. (2020) A Novel Flow Cytometric Assay to Identify Inhibitors of RBPJ-DNA Interactions. SLAS discovery : advancing life sciences R & D, 25(8), 895.

Mukherjee A, et al. (2020) CL6mN: Rationally Designed Optogenetic Photoswitches with Tunable Dissociation Dynamics. *ACS synthetic biology*, 9(9), 2274.

Cheng W, et al. (2019) Activation of Notch1 signaling by HTLV-1 Tax promotes proliferation of adult T-cell leukemia cells. *Biochemical and biophysical research communications*, 512(3), 598.

LaFoya B, et al. (2019) A comparison of resveratrol and other polyphenolic compounds on Notch activation and endothelial cell activity. *PloS one*, 14(1), e0210607.

Zhang H, et al. (2019) Hyaluronan-mediated motility receptor confers resistance to chemotherapy via TGF β /Smad2-induced epithelial-mesenchymal transition in gastric cancer. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 33(5), 6365.

LaFoya B, et al. (2018) Src kinase phosphorylates Notch1 to inhibit MAML binding. *Scientific reports*, 8(1), 15515.

Zhang C, et al. (2018) Cbx3 inhibits vascular smooth muscle cell proliferation, migration, and neointima formation. *Cardiovascular research*, 114(3), 443.

Castro Colabianchi AM, et al. (2018) Notch1 is asymmetrically distributed from the beginning of embryogenesis and controls the ventral center. *Development (Cambridge, England)*, 145(14).

Yamashita W, et al. (2018) Conserved and divergent functions of Pax6 underlie species-specific neurogenic patterns in the developing amniote brain. *Development (Cambridge, England)*, 145(8).

Kim TJ, et al. (2018) The Antitumor Natural Compound Falcarindiol Disrupts Neural Stem Cell Homeostasis by Suppressing Notch Pathway. *International journal of molecular sciences*, 19(11).

Robinson SC, et al. (2017) Kaiso differentially regulates components of the Notch signaling pathway in intestinal cells. *Cell communication and signaling : CCS*, 15(1), 24.