

Resource Summary Report

Generated by [PRECISE-TBI](#) on Sep 1, 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: 20260829T080519+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 [PRECISE-TBI](#) .

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).

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).

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).

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.