Resource Summary Report

Generated by NIF on Jul 29, 2026

CRISPRoff-v2.1

RRID:Addgene_167981
Type: Plasmid

Proper Citation

RRID:Addgene_167981

Plasmid Information

URL: http://www.addgene.org/167981

Proper Citation: RRID:Addgene_167981

Insert Name: CRISPRoff-v2.1 (DNMT3A-DNMT3L-dCas9-BFP-KRAB)

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: PMID:33838111

Vector Backbone Description: Backbone Size:4836; Vector Backbone:CAG expression plasmid; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: CRISPRoff-v2.1

Record Creation Time: 20220422T221943+0000

Record Last Update: 20260725T074222+0000

Ratings and Alerts

No rating or validation information has been found for CRISPRoff-v2.1.

No alerts have been found for CRISPRoff-v2.1.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 19 mentions in open access literature.

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

Waldo JJ, et al. (2025) Durable HTT silencing using non-evolved dCas9 epigenome editors in patient-derived cells. Molecular therapy. Nucleic acids, 36(2), 102561.

Liesenfelder S, et al. (2025) Epigenetic editing at individual age-associated CpGs affects the genome-wide epigenetic aging landscape. Nature aging, 5(6), 997.

Pattali RK, et al. (2025) CRISPRoff epigenome editing for programmable gene silencing in human cell lines and primary T cells. Methods in enzymology, 712, 517.

Allen TP, et al. (2025) dFLASH; dual FLuorescent transcription factor activity sensor for histone integrated live-cell reporting and high-content screening. Nature communications, 16(1), 3298.

Kozlova A, et al. (2025) PICALM Alzheimer's risk allele causes aberrant lipid droplets in microglia. Nature, 646(8087), 1178.

Sarno F, et al. (2025) Epigenetic editing and epi-drugs: a combination strategy to simultaneously target KDM4 as a novel anticancer approach. Clinical epigenetics, 17(1), 105.

Bell HW, et al. (2025) Removal of promoter CpG methylation by epigenome editing reverses HBG silencing. Nature communications, 16(1), 6919.

Guo D, et al. (2025) The ZBTB24-CDCA7-HELLS axis suppresses the totipotent 2C-like reprogramming by maintaining Dux methylation and repression. Nucleic acids research, 53(7).

Xu D, et al. (2025) Programmable epigenome editing by transient delivery of CRISPR epigenome editor ribonucleoproteins. Nature communications, 16(1), 7948.

Gu S, et al. (2025) Elucidating the genetic mechanisms governing cytosine base editing outcomes through CRISPRi screens. Nature communications, 16(1), 4685.

Weber R, et al. (2024) Epigenetic modification and characterization of the MGMT promoter region using CRISPRoff in glioblastoma cells. Frontiers in oncology, 14, 1342114.

Li X, et al. (2024) Chromatin context-dependent regulation and epigenetic manipulation of prime editing. Cell, 187(10), 2411.

He W, et al. (2024) Epigenetic editing of BRCA1 promoter increases cisplatin and olaparib sensitivity of ovarian cancer cells. Epigenetics, 19(1), 2357518.

Kawa Y, et al. (2024) Epigenome editing revealed the role of DNA methylation of T-DMR/CpG island shore on Runx2 transcription. Biochemistry and biophysics reports, 38, 101733.

Kozlova A, et al. (2024) Alzheimer's disease risk allele of PICALM causes detrimental lipid droplets in microglia. Research square.

Han X, et al. (2023) Downregulation of MGMT expression by targeted editing of DNA methylation enhances temozolomide sensitivity in glioblastoma. Neoplasia (New York, N.Y.), 44, 100929.

Shi Y, et al. (2022) Nuclear receptor ligand screening in an iPSC-derived in vitro blood-brain barrier model identifies new contributors to leptin transport. Fluids and barriers of the CNS, 19(1), 77.

Sarno F, et al. (2022) Functional Validation of the Putative Oncogenic Activity of PLAU. Biomedicines, 11(1).

O'Geen H, et al. (2022) Determinants of heritable gene silencing for KRAB-dCas9 + DNMT3 and Ezh2-dCas9 + DNMT3 hit-and-run epigenome editing. Nucleic acids research, 50(6), 3239.