

Resource Summary Report

Generated by [NIF](#) on Sep 16, 2026

pEF1a-FB-dCas9-puro

RRID:Addgene_100547

Type: Plasmid

Proper Citation

RRID:Addgene_100547

Plasmid Information

URL: <http://www.addgene.org/100547>

Proper Citation: RRID:Addgene_100547

Insert Name: N-terminal Flag and biotin-acceptor-site (FB)-tagged dCas9

Organism: Streptococcus pyogenes

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:28841410](#)

Vector Backbone Description: Backbone Size:7064; Vector Backbone:pEF1a-FB-puro; Vector Types:Mammalian Expression, CRISPR; Bacterial Resistance:Ampicillin

Plasmid Name: pEF1a-FB-dCas9-puro

Record Creation Time: 20220422T221448+0000

Record Last Update: 20260912T091337+0000

Ratings and Alerts

No rating or validation information has been found for pEF1a-FB-dCas9-puro.

No alerts have been found for pEF1a-FB-dCas9-puro.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 18 mentions in open access literature.

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

Gong H, et al. (2025) PRODH2-Mediated Metabolism in the Bone Microenvironment Promotes Breast Cancer Metastasis. *Cancer research*, 85(21), 4198.

Zhang W, et al. (2025) Targeted demethylation of the EphA7 promoter inhibits tumorigenesis via the SP1/DNMT1 and PI3K/AKT axes and improves the response to multiple therapies in cervical cancer. *Cell death & disease*, 16(1), 324.

Alkhayer R, et al. (2024) Protocol to target a promoter region in human embryonic kidney cells using the CRISPR-dCas9 system for single-locus proteomics. *STAR protocols*, 5(2), 103045.

Li S, et al. (2024) TERT upstream promoter methylation regulates TERT expression and acts as a therapeutic target in TERT promoter mutation-negative thyroid cancer. *Cancer cell international*, 24(1), 271.

Alkhayer R, et al. (2023) KLF4-mediated upregulation of the NKG2D ligand MICA in acute myeloid leukemia: a novel therapeutic target identified by enChIP. *Cell communication and signaling : CCS*, 21(1), 94.

Zhu P, et al. (2022) Gut microbiota drives macrophage-dependent self-renewal of intestinal stem cells via niche enteric serotonergic neurons. *Cell research*, 32(6), 555.

Yang H, et al. (2022) The risk variant rs11836367 contributes to breast cancer onset and metastasis by attenuating Wnt signaling via regulating NTN4 expression. *Science advances*, 8(23), eabn3509.

Nargund AM, et al. (2022) Chromatin Rewiring by Mismatch Repair Protein MSH2 Alters Cell Adhesion Pathways and Sensitivity to BET Inhibition in Gastric Cancer. *Cancer research*, 82(14), 2538.

Abudourousuli A, et al. (2022) NKX2-8/PTHrP Axis-Mediated Osteoclastogenesis and Bone Metastasis in Breast Cancer. *Frontiers in oncology*, 12, 907000.

Chen Z, et al. (2022) circREEP3 Drives Colorectal Cancer Progression via Activation of FKBP10 Transcription and Restriction of Antitumor Immunity. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 9(13), e2105160.

Han C, et al. (2022) Chromatin-associated orphan snoRNA regulates DNA damage-mediated differentiation via a non-canonical complex. *Cell reports*, 38(13), 110421.

Zhang S, et al. (2021) RNF219/??-Catenin/LGALS3 Axis Promotes Hepatocellular Carcinoma Bone Metastasis and Associated Skeletal Complications. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 8(4), 2001961.

Fan W, et al. (2021) SIRT1 regulates sphingolipid metabolism and neural differentiation of mouse embryonic stem cells through c-Myc-SMPDL3B. *eLife*, 10.

Yang F, et al. (2021) Shape of promoter antisense RNAs regulates ligand-induced transcription activation. *Nature*, 595(7867), 444.

Cha HJ, et al. (2021) Inner nuclear protein Matrin-3 coordinates cell differentiation by stabilizing chromatin architecture. *Nature communications*, 12(1), 6241.

Chen Z, et al. (2021) Circular RNA cia-MAF drives self-renewal and metastasis of liver tumor-initiating cells via transcription factor MAFF. *The Journal of clinical investigation*, 131(19).

Liu X, et al. (2020) Multiplexed capture of spatial configuration and temporal dynamics of locus-specific 3D chromatin by biotinylated dCas9. *Genome biology*, 21(1), 59.

Liu X, et al. (2018) CAPTURE: In Situ Analysis of Chromatin Composition of Endogenous Genomic Loci by Biotinylated dCas9. *Current protocols in molecular biology*, 123(1), e64.