

Resource Summary Report

Generated by [NIF](#) on Sep 10, 2026

[phU6-gRNA](#)

RRID:Addgene_53188

Type: Plasmid

Proper Citation

RRID:Addgene_53188

Plasmid Information

URL: <http://www.addgene.org/53188>

Proper Citation: RRID:Addgene_53188

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:25122746](#)

Vector Backbone Description: Backbone Size:3515; Vector Backbone:pzDonor; Vector Types:Mammalian Expression, CRISPR; Bacterial Resistance:Kanamycin

Plasmid Name: phU6-gRNA

Record Creation Time: 20220422T222312+0000

Record Last Update: 20260905T075758+0000

Ratings and Alerts

No rating or validation information has been found for phU6-gRNA.

No alerts have been found for phU6-gRNA.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 49 mentions in open access literature.

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

Mirizio G, et al. (2026) Combinatorial pioneer transcription factor binding reinforces bivalent epigenetic states to preserve lineage fidelity. *bioRxiv : the preprint server for biology*.

Matsui S, et al. (2026) MAPK/ERK signaling regulates H3K9me3 heterochromatin reorganization to confer mesendoderm developmental competence. *Nucleic acids research*, 54(12).

Stankevičius V, et al. (2026) Catalytic footprints of DNMT1 dynamics during mammalian cell state transitions. *Cell reports*, 45(6), 117435.

Venhuizen AJ, et al. (2026) Hepatocellular carcinoma-linked AXIN1 mutations drive low Wnt/ β -catenin activity enabling niche-independent growth and YAP/TAZ signaling. *iScience*, 29(1), 114501.

Yu H, et al. (2025) H3K4me3 amplifies transcription at intergenic active regulatory elements. *Genes & development*, 39(21-22), 1290.

El Bouazzaoui L, et al. (2025) BRAFV600E augments WNT signaling in colorectal cancer via aberrant DNA methylation. *iScience*, 28(7), 112708.

Gong JN, et al. (2025) Re-appraising assays on permeabilized blood cancer cells testing venetoclax or other BH3 mimetic agents selectively targeting pro-survival BCL2 proteins. *Cell death and differentiation*, 32(8), 1382.

Valcárcel G, et al. (2025) Modulating immune cell fate and inflammation through CRISPR-mediated DNA methylation editing. *Science advances*, 11(29), eadt1644.

El Bouazzaoui L, et al. (2025) BRAFV600E maintains the CpG island methylator phenotype, and DNA methylation of PRC2 targets genes in colon cancer. *iScience*, 28(7), 112905.

Nelson HM, et al. (2024) Transfer of miR-100 and miR-125b increases 3D growth and invasiveness in recipient cancer cells. *Extracellular vesicles and circulating nucleic acids*, 5(3), 397.

Ma Y, et al. (2024) Exchange of subtelomeric regions between chromosomes 4q and 10q reverts the FSHD genotype and phenotype. *Science advances*, 10(18), eadl1922.

Matsui S, et al. (2024) Pioneer and PRDM transcription factors coordinate bivalent epigenetic states to safeguard cell fate. *Molecular cell*, 84(3), 476.

Matsui S, et al. (2024) Protocol for establishing inducible CRISPR interference system for multiple-gene silencing in human pluripotent stem cells. *STAR protocols*, 5(3), 103221.

Huang S, et al. (2024) Extended replicative lifespan of primary resting T cells by CRISPR/dCas9-based epigenetic modifiers and transcriptional activators. *Cellular and molecular life sciences : CMLS*, 81(1), 407.

Cai H, et al. (2024) CRISPR/Cas9 model of prostate cancer identifies Kmt2c deficiency as a metastatic driver by Odam/Cabs1 gene cluster expression. *Nature communications*,

15(1), 2088.

Sifri C, et al. (2023) An AlphaFold2 map of the 53BP1 pathway identifies a direct SHLD3-RIF1 interaction critical for shieldin activity. *EMBO reports*, 24(8), e56834.

Canoy RJ, et al. (2023) Easy and robust electrotransfection protocol for efficient ectopic gene expression and genome editing in human B cells. *Gene therapy*, 30(1-2), 167.

Morimoto M, et al. (2023) Bi-allelic ATG4D variants are associated with a neurodevelopmental disorder characterized by speech and motor impairment. *NPJ genomic medicine*, 8(1), 4.

Loftus D, et al. (2023) Allelic chromatin structure primes imprinted expression of Kcnk9 during neurogenesis. *bioRxiv : the preprint server for biology*.

Grosch M, et al. (2023) Striated muscle-specific base editing enables correction of mutations causing dilated cardiomyopathy. *Nature communications*, 14(1), 3714.