

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

pY010 (pcDNA3.1-hAsCpf1)

RRID:Addgene_69982

Type: Plasmid

Proper Citation

RRID:Addgene_69982

Plasmid Information

URL: <http://www.addgene.org/69982>

Proper Citation: RRID:Addgene_69982

Insert Name: hAsCpf1

Organism: Acidaminococcus_sp_BV3L6

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:26422227](#)

Vector Backbone Description: Backbone Size:5354; Vector Backbone:pcDNA3.1; Vector Types:Mammalian Expression, CRISPR; Bacterial Resistance:Ampicillin

Plasmid Name: pY010 (pcDNA3.1-hAsCpf1)

Record Creation Time: 20220422T222433+0000

Record Last Update: 20260808T082044+0000

Ratings and Alerts

No rating or validation information has been found for pY010 (pcDNA3.1-hAsCpf1).

No alerts have been found for pY010 (pcDNA3.1-hAsCpf1).

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 61 mentions in open access literature.

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

Kim S, et al. (2026) CRISPR-Cpf1-Mediated Gene-Editing System Based on a Single Bidirectional Promoter. *International journal of molecular sciences*, 27(10).

Nikitchina N, et al. (2025) Targeted deletions in human mitochondrial DNA engineered by Type V CRISPR-Cas12a system. *NAR molecular medicine*, 2(2), ugaf021.

Chen P, et al. (2025) Highly parallel profiling of the activities and specificities of Cas12a variants in human cells. *Nature communications*, 16(1), 3022.

Raghavan R, et al. (2025) Rational engineering of minimally immunogenic nucleases for gene therapy. *Nature communications*, 16(1), 105.

Chen P, et al. (2024) Engineering of Cas12a nuclease variants with enhanced genome-editing specificity. *PLoS biology*, 22(3), e3002514.

Wang H, et al. (2024) Engineering of a compact, high-fidelity EbCas12a variant that can be packaged with its crRNA into an all-in-one AAV vector delivery system. *PLoS biology*, 22(5), e3002619.

Slaman E, et al. (2024) Comparison of Cas12a and Cas9-mediated mutagenesis in tomato cells. *Scientific reports*, 14(1), 4508.

Illa-Berenguer E, et al. (2023) Editing efficiencies with Cas9 orthologs, Cas12a endonucleases, and temperature in rice. *Frontiers in genome editing*, 5, 1074641.

Zhou J, et al. (2022) Cas12a variants designed for lower genome-wide off-target effect through stringent PAM recognition. *Molecular therapy : the journal of the American Society of Gene Therapy*, 30(1), 244.

Ou T, et al. (2022) Reprogramming of the heavy-chain CDR3 regions of a human antibody repertoire. *Molecular therapy : the journal of the American Society of Gene Therapy*, 30(1), 184.

Blomme J, et al. (2022) The heat is on: a simple method to increase genome editing efficiency in plants. *BMC plant biology*, 22(1), 142.

Shin HR, et al. (2021) Gene Manipulation Using Fusion Guide RNAs for Cas9 and Cas12a. *Methods in molecular biology (Clifton, N.J.)*, 2162, 185.

Duan N, et al. (2021) An Episomal CRISPR/Cas12a System for Mediating Efficient Gene Editing. *Life (Basel, Switzerland)*, 11(11).

Wang X, et al. (2021) A far-red light-inducible CRISPR-Cas12a platform for remote-controlled genome editing and gene activation. *Science advances*, 7(50), eabh2358.

Berkhout B, et al. (2021) Design and Evaluation of Guide RNA Transcripts with a 3'-Terminal HDV Ribozyme to Enhance CRISPR-Based Gene Inactivation. *Methods in molecular biology (Clifton, N.J.)*, 2167, 205.

McMahon MA, et al. (2021) Gene Disruption Using Chemically Modified CRISPR-Cpf1 RNA. *Methods in molecular biology* (Clifton, N.J.), 2162, 49.

Ageely EA, et al. (2021) Gene editing with CRISPR-Cas12a guides possessing ribose-modified pseudoknot handles. *Nature communications*, 12(1), 6591.

Sherstyuk VV, et al. (2021) Generation of Transgenic Rat Embryonic Stem Cells Using the CRISPR/Cpf1 System for Inducible Gene Knockout. *Biochemistry. Biokhimiia*, 86(7), 843.

Tran MH, et al. (2021) A more efficient CRISPR-Cas12a variant derived from *Lachnospiraceae* bacterium MA2020. *Molecular therapy. Nucleic acids*, 24, 40.

Chen P, et al. (2020) A Cas12a ortholog with stringent PAM recognition followed by low off-target editing rates for genome editing. *Genome biology*, 21(1), 78.