Resource Summary Report

Generated by SPARC SAWG on Aug 9, 2026

pY004 (pcDNA3.1-hFnCpf1)

RRID:Addgene_69976
Type: Plasmid

Proper Citation

RRID:Addgene_69976

Plasmid Information

URL: http://www.addgene.org/69976

Proper Citation: RRID:Addgene_69976

Insert Name: hFnCpf1

Organism: Francisella_novicida

Bacterial Resistance: Ampicillin

Defining Citation: PMID:26422227

Vector Backbone Description: Backbone Size:5364; Vector Backbone:pcDNA3.1; Vector Types:Mammalian Expression, CRISPR; Bacterial Resistance:Ampicillin

Plasmid Name: pY004 (pcDNA3.1-hFnCpf1)

Record Creation Time: 20220422T222433+0000

Record Last Update: 20260808T082044+0000

Ratings and Alerts

No rating or validation information has been found for pY004 (pcDNA3.1-hFnCpf1).

No alerts have been found for pY004 (pcDNA3.1-hFnCpf1).

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 22 mentions in open access literature.

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

Zheng Z, et al. (2025) GenomePAM directs PAM characterization and engineering of CRISPR-Cas nucleases using mammalian genome repeats. Research square.

Nobori T, et al. (2025) A rare PRIMER cell state in plant immunity. Nature, 638(8049), 197.

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

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

Jabalera Y, et al. (2024) A resurrected ancestor of Cas12a expands target access and substrate recognition for nucleic acid editing and detection. Nature biotechnology.

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.

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.

Chen L, et al. (2021) Comprehensive optimization of a reporter assay toolbox for three distinct CRISPR-Cas systems. FEBS open bio, 11(7), 1965.

Cheng P, et al. (2021) FnCas12a/crRNA-Mediated Genome Editing in Eimeria tenella. Frontiers in genetics, 12, 738746.

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.

Tang L, et al. (2019) Efficient cleavage resolves PAM preferences of CRISPR-Cas in human cells. Cell regeneration (London, England), 8(2), 44.

Liu P, et al. (2019) Enhanced Cas12a editing in mammalian cells and zebrafish. Nucleic acids research, 47(8), 4169.

Kleinstiver BP, et al. (2019) Engineered CRISPR-Cas12a variants with increased activities and improved targeting ranges for gene, epigenetic and base editing. Nature biotechnology, 37(3), 276.

Liao C, et al. (2019) Modular one-pot assembly of CRISPR arrays enables library generation and reveals factors influencing crRNA biogenesis. Nature communications, 10(1), 2948.

T??th E, et al. (2018) Mb- and FnCpf1 nucleases are active in mammalian cells: activities and PAM preferences of four wild-type Cpf1 nucleases and of their altered PAM specificity variants. Nucleic acids research, 46(19), 10272.

Xie H, et al. (2018) SaCas9 Requires 5'-NNGRRT-3' PAM for Sufficient Cleavage and Possesses Higher Cleavage Activity than SpCas9 or FnCpf1 in Human Cells. Biotechnology journal, 13(4), e1700561.

Sun H, et al. (2018) A Single Multiplex crRNA Array for FnCpf1-Mediated Human Genome Editing. Molecular therapy : the journal of the American Society of Gene Therapy, 26(8), 2070.

Marino ND, et al. (2018) Discovery of widespread type I and type V CRISPR-Cas inhibitors. Science (New York, N.Y.), 362(6411), 240.

Lin L, et al. (2018) Engineering the Direct Repeat Sequence of crRNA for Optimization of FnCpf1-Mediated Genome Editing in Human Cells. Molecular therapy : the journal of the American Society of Gene Therapy, 26(11), 2650.

Tu M, et al. (2017) A 'new lease of life': FnCpf1 possesses DNA cleavage activity for genome editing in human cells. Nucleic acids research, 45(19), 11295.