

Resource Summary Report

Generated by [NIF](#) on Jul 31, 2026

hCas9

RRID:Addgene_41815

Type: Plasmid

Proper Citation

RRID:Addgene_41815

Plasmid Information

URL: <http://www.addgene.org/41815>

Proper Citation: RRID:Addgene_41815

Insert Name: Cas9

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:23287722](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Vector Backbone:pcDNA3.3-TOPO; Vector Types:Mammalian Expression, CRISPR; Bacterial Resistance:Ampicillin

Comments: For additional information: http://arep.med.harvard.edu/human_crispr/

Plasmid Name: hCas9

Relevant Mutation: human codon-optimized

Record Creation Time: 20220422T222216+0000

Record Last Update: 20260725T074655+0000

Ratings and Alerts

No rating or validation information has been found for hCas9.

No alerts have been found for hCas9.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 448 mentions in open access literature.

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

Szkodny AC, et al. (2025) A Flexible Hybrid Site-Specific Integration-Based Expression System in CHO Cells for Higher-Throughput Evaluation of Monoclonal Antibody Expression Cassettes. *Biotechnology journal*, 20(1), e202400520.

Shock LS, et al. (2025) Cytosine methylase and hydroxymethylase activity in mammalian mitochondria. *Frontiers in cell and developmental biology*, 13, 1677402.

Ogawa Y, et al. (2025) GATA4 binding to the Sox9 enhancer mXYSRa/Enh13 is critical for testis differentiation in mouse. *Communications biology*, 8(1), 81.

Mladenov E, et al. (2025) CRISPR/Cas9 generated DSB clusters mimic complex lesions induced by high-LET radiation and shift repair from c-NHEJ to mutagenic repair pathways. *Scientific reports*, 15(1), 36480.

Minowa-Nozawa A, et al. (2025) RabGAP1L modulates Rab7A and Rab10 to orchestrate cell-autonomous immunity. *Cell reports*, 44(5), 115599.

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.

Hirose J, et al. (2025) Targeted in vivo gene integration of a secretion-enabled GLP-1 receptor agonist reverses diet-induced non-genetic obesity and pre-diabetes. *Communications medicine*, 5(1), 269.

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

Chou PC, et al. (2025) Phase separation of TTBK2 and CEP164 is necessary for ciliogenesis. *Cell reports*, 44(6), 115810.

Ye Y, et al. (2025) DNA-damage orchestrates self-renewal and differentiation via reciprocal p53 family and Hippo/Wnt/TGF- β pathway activation in embryonic stem cells. *Cellular and molecular life sciences : CMLS*, 82(1), 38.

Mori LP, et al. (2025) The p400 complex promotes HIV-1 latency by suppressing viral transcription and altering the host cell state. *Nucleic acids research*, 53(15).

Simpson JE, et al. (2024) Autophagy supports PDGFRA-dependent brain tumor development by enhancing oncogenic signaling. *Developmental cell*, 59(2), 228.

Matsumoto D, et al. (2024) SpCas9-HF1 enhances accuracy of cell cycle-dependent genome editing by increasing HDR efficiency, and by reducing off-target effects and indel rates. *Molecular therapy. Nucleic acids*, 35(1), 102124.

Su W, et al. (2024) Furin Egress from the TGN is Regulated by Membrane-Associated RING-CH Finger (MARCHF) Proteins and Ubiquitin-Specific Protease 32 (USP32) via Nondegradable K33-Polyubiquitination. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 11(35), e2403732.

Makar AN, et al. (2024) The V-ATPase complex component RNaseK is required for lysosomal hydrolase delivery and autophagosome degradation. *Nature communications*, 15(1), 7743.

Jeon Y, et al. (2024) RNA-mediated double-strand break repair by end-joining mechanisms. *Nature communications*, 15(1), 7935.

Dai L, et al. (2024) Identification and Validation of New DNA-PKcs Inhibitors through High-Throughput Virtual Screening and Experimental Verification. *International journal of molecular sciences*, 25(14).

Ma X, et al. (2024) β -catenin mediates endodermal commitment of human ES cells via distinct transactivation functions. *Cell & bioscience*, 14(1), 96.

Elbassiouny AA, et al. (2024) Evolution of a novel regulatory mechanism of hypoxia inducible factor in hypoxia-tolerant electric fishes. *The Journal of biological chemistry*, 300(3), 105727.

Hirose J, et al. (2024) Lipid Nanoparticles Enable Efficient In Vivo DNA Knock-In via HITI-Mediated Genome Editing. *Biomolecules*, 14(12).