

Resource Summary Report

Generated by [NIF](#) on Sep 1, 2026

hCas9_D10A

RRID:Addgene_41816

Type: Plasmid

Proper Citation

RRID:Addgene_41816

Plasmid Information

URL: <http://www.addgene.org/41816>

Proper Citation: RRID:Addgene_41816

Insert Name: Cas9_D10A

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_D10A

Relevant Mutation: human codon-optimized, D10A nickase

Record Creation Time: 20220422T222216+0000

Record Last Update: 20260829T080518+0000

Ratings and Alerts

No rating or validation information has been found for hCas9_D10A.

No alerts have been found for hCas9_D10A.

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](#) .

MacMillan AC, et al. (2025) PRPS activity tunes redox homeostasis in Myc-driven lymphoma. *Redox biology*, 84, 103649.

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.

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.

MacMillan AC, et al. (2025) PRPS activity tunes redox homeostasis in Myc-driven lymphoma. *bioRxiv : the preprint server for biology*.

Karki BR, et al. (2025) The role of gene duplication and paralog specialisation in the evolution of the mammalian PRPS complex. *Nature communications*, 16(1), 6076.

Polyzos AA, et al. (2024) Base excision repair and double strand break repair cooperate to modulate the formation of unrepaired double strand breaks in mouse brain. *Nature communications*, 15(1), 7726.

Habu T, et al. (2022) Gulo gene locus, a new gene editing locus for mammalian cells. *Biotechnology journal*, 17(7), e2100493.

Nie J, et al. (2022) CHD7 regulates otic lineage specification and hair cell differentiation in human inner ear organoids. *Nature communications*, 13(1), 7053.

Baldassarre M, et al. (2021) The Rab32/BLOC-3-dependent pathway mediates host defense against different pathogens in human macrophages. *Science advances*, 7(3).

Chen ZZ, et al. (2021) PINK1 gene mutation by pair truncated sgRNA/Cas9-D10A in cynomolgus monkeys. *Zoological research*, 42(4), 469.

Pallarès-Masmitjà M, et al. (2021) Find and cut-and-transfer (FiCAT) mammalian genome engineering. *Nature communications*, 12(1), 7071.

Laigle V, et al. (2021) Quantitative Ubiquitylome Analysis Reveals the Specificity of RNF111/Arkadia E3 Ubiquitin Ligase for its Degradative Substrates SKI and SKIL/SnoN in TGF- β Signaling Pathway. *Molecular & cellular proteomics : MCP*, 20, 100173.

Bondarieva A, et al. (2020) Proline-rich protein PRR19 functions with cyclin-like CNTD1 to promote meiotic crossing over in mouse. *Nature communications*, 11(1), 3101.

Borrás T, et al. (2020) Generation of a Matrix Gla (Mgp) floxed mouse, followed by conditional knockout, uncovers a new Mgp function in the eye. *Scientific reports*, 10(1), 18583.

Sheng C, et al. (2019) PCNA-Mediated Degradation of p21 Coordinates the DNA Damage Response and Cell Cycle Regulation in Individual Cells. *Cell reports*, 27(1), 48.

Prorok P, et al. (2019) Involvement of G-quadruplex regions in mammalian replication origin activity. *Nature communications*, 10(1), 3274.

Li Y, et al. (2019) Genome-edited skin epidermal stem cells protect mice from cocaine-seeking behaviour and cocaine overdose. *Nature biomedical engineering*, 3(2), 105.

Woo Y, et al. (2019) Sequential phosphorylation of NDEL1 by the DYRK2-GSK3 β complex is critical for neuronal morphogenesis. *eLife*, 8.

Winter J, et al. (2019) Targeted exon skipping with AAV-mediated split adenine base editors. *Cell discovery*, 5, 41.

Bhagwan JR, et al. (2019) Variable expression and silencing of CRISPR-Cas9 targeted transgenes identifies the AAVS1 locus as not an entirely safe harbour. *F1000Research*, 8, 1911.