Resource Summary Report

Generated by RRID on Aug 17, 2026

pCAG-T3-hCasD10A-pA

RRID:Addgene_51638
Type: Plasmid

Proper Citation

RRID:Addgene_51638

Plasmid Information

URL: http://www.addgene.org/51638

Proper Citation: RRID:Addgene_51638

Insert Name: Codon-optimized Cas9 D10A

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: PMID:24491566

Vector Backbone Description: Vector Backbone:pCAGGS; Vector Types:Mammalian Expression, CRISPR; Bacterial Resistance:Ampicillin

Comments: This plasmid vector was constructed by mutation PCR of pCAG-T3-hCAS9-pA plasmid vector (Addgene plasmid 48625) using the primers (Forward primer, 5'-AGTACTCCATTGGGCTCGccATCGGCACAAAC, and Reverse primer, 5'-CGAGCCCAATGGAGTACTTCTTGTCGGCTGC). For the in vitro synthesis of CAS9 D10A mRNAs, the vector was linearized by SphI and in-vitro transcribed using T3-RNA-polymerase (Promega) in the presence of m7G(5?)ppp(5?)G to synthesize capped RNA. The Tbpl1 3?UTR 95 nucleotide polyA tail at the 3' end of the insert allows in vitro transcribed mRNA from this plasmid to be used directly for microinjection into animal embryos or oocytes without additional polyadenylation treatment. The CAG promoter in this plasmid also allows it to be used as a CAS9-expression vector.

Plasmid Name: pCAG-T3-hCasD10A-pA

Record Creation Time: 20220422T222303+0000

Record Last Update: 20260815T081619+0000

Ratings and Alerts

No rating or validation information has been found for pCAG-T3-hCasD10A-pA.

No alerts have been found for pCAG-T3-hCasD10A-pA.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Tsai YY, et al. (2023) Activation of TrkB signaling mitigates cerebellar anomalies caused by Rbm4-Bdnf deficiency. Communications biology, 6(1), 910.

Silva-Pinheiro P, et al. (2021) DNA polymerase gamma mutations that impair holoenzyme stability cause catalytic subunit depletion. Nucleic acids research, 49(9), 5230.

Shih PY, et al. (2020) Autism-linked mutations of CTTNBP2 reduce social interaction and impair dendritic spine formation via diverse mechanisms. Acta neuropathologica communications, 8(1), 185.

Kitamoto K, et al. (2020) Generation of mouse model of TGFBI-R124C corneal dystrophy using CRISPR/Cas9-mediated homology-directed repair. Scientific reports, 10(1), 2000.