

Resource Summary Report

Generated by [RRID](#) on Aug 21, 2026

PX551

RRID:Addgene_60957

Type: Plasmid

Proper Citation

RRID:Addgene_60957

Plasmid Information

URL: <http://www.addgene.org/60957>

Proper Citation: RRID:Addgene_60957

Insert Name: SpCas9

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:25326897](#)

Vector Backbone Description: Backbone Size:2905; Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV, CRISPR; Bacterial Resistance:Ampicillin

Plasmid Name: PX551

Record Creation Time: 20220422T222350+0000

Record Last Update: 20260815T081737+0000

Ratings and Alerts

No rating or validation information has been found for PX551.

No alerts have been found for PX551.

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 [RRID](#) .

Parra-Rivas LA, et al. (2025) Protocol for CRISPR-based manipulation and visualization of endogenous α -synuclein in cultured mouse hippocampal neurons. STAR protocols, 6(3), 103945.

Wong VC, et al. (2025) Single-Particle Tracking of AMPA Receptor-Containing Vesicles. Bio-protocol, 15(11), e5325.

Ogawa Y, et al. (2025) Hide-and-Seek genome editing reveals that Gephyrin is required for axo-axonic synapse assembly. Proceedings of the National Academy of Sciences of the United States of America, 122(32), e2500726122.

O'Driscoll EE, et al. (2025) CRISPR screen reveals modifiers of rAAV production including known rAAV infection genes playing an unexpected role in vector production. Molecular therapy. Methods & clinical development, 33(1), 101408.

Nouraein S, et al. (2024) Acoustically targeted noninvasive gene therapy in large brain volumes. Gene therapy, 31(3-4), 85.

Rohn TT, et al. (2024) Intranasal delivery of shRNA to knockdown the 5HT-2A receptor enhances memory and alleviates anxiety. Translational psychiatry, 14(1), 154.

Wong VC, et al. (2024) Plasticity-induced actin polymerization in the dendritic shaft regulates intracellular AMPA receptor trafficking. eLife, 13.

Fagan KJ, et al. (2024) Cas9 editing of ATXN1 in a spinocerebellar ataxia type 1 mice and human iPSC-derived neurons. Molecular therapy. Nucleic acids, 35(4), 102317.

Lesuis SL, et al. (2024) Stress disrupts engram ensembles in lateral amygdala to generalize threat memory in mice. Cell.

Chung M, et al. (2024) Conditional knockout of Shank3 in the ventral CA1 by quantitative in vivo genome-editing impairs social memory in mice. Nature communications, 15(1), 4531.

Shin JW, et al. (2024) Personalized allele-specific CRISPR-Cas9 strategies for myofibrillar myopathy 6. medRxiv : the preprint server for health sciences.

Ogawa Y, et al. (2023) Antibody-directed extracellular proximity biotinylation reveals Contactin-1 regulates axo-axonic innervation of axon initial segments. bioRxiv : the preprint server for biology.

Qian X, et al. (2023) Ceramide compensation by ceramide synthases preserves retinal function and structure in a retinal dystrophy mouse model. Disease models & mechanisms, 16(7).

Wen YX, et al. (2023) Oxytocinergic neurons, but not oxytocin, are crucial for male penile erection. Neuropharmacology, 235, 109576.

Nong Y, et al. (2023) UBE3A and transsynaptic complex NRXN1-CBLN1-GluD1 in a hypothalamic VMHvl-arcuate feedback circuit regulates aggression. *bioRxiv : the preprint server for biology*.

Simpson BP, et al. (2023) Targeted long-read sequencing captures CRISPR editing and AAV integration outcomes in brain. *Molecular therapy : the journal of the American Society of Gene Therapy*, 31(3), 760.

Parra-Rivas LA, et al. (2023) Serine-129 phosphorylation of α -synuclein is an activity-dependent trigger for physiologic protein-protein interactions and synaptic function. *Neuron*, 111(24), 4006.

Ogawa Y, et al. (2023) Antibody-directed extracellular proximity biotinylation reveals that Contactin-1 regulates axo-axonic innervation of axon initial segments. *Nature communications*, 14(1), 6797.

Li H, et al. (2022) Neurotensin orchestrates valence assignment in the amygdala. *Nature*, 608(7923), 586.

Shi DD, et al. (2022) De novo pyrimidine synthesis is a targetable vulnerability in IDH mutant glioma. *Cancer cell*, 40(9), 939.