

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

pXR004: CasRx pre-gRNA cloning backbone

RRID:Addgene_109054

Type: Plasmid

Proper Citation

RRID:Addgene_109054

Plasmid Information

URL: <http://www.addgene.org/109054>

Proper Citation: RRID:Addgene_109054

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:29551272](#)

Vector Backbone Description: Backbone Size:2686; Vector Backbone:pUC19; Vector Types:Mammalian Expression, CRISPR; Bacterial Resistance:Ampicillin

Plasmid Name: pXR004: CasRx pre-gRNA cloning backbone

Record Creation Time: 20220422T221529+0000

Record Last Update: 20260808T080414+0000

Ratings and Alerts

No rating or validation information has been found for pXR004: CasRx pre-gRNA cloning backbone.

No alerts have been found for pXR004: CasRx pre-gRNA cloning backbone.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 12 mentions in open access literature.

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

Li X, et al. (2025) Unlocking the Puzzle of Mammalian Transfection: The Role of the RNA-sensing-Mediated Interferon Response in the Cellular Defense Against Foreign DNA Intrusion. *International journal of biological sciences*, 21(9), 3886.

Xie J, et al. (2025) Comprehensive identification of proteins interacting with long non-coding RNA TUG1 in R-loop regulation. *Journal of biochemistry*, 178(4), 251.

Suzuki MM, et al. (2023) TUG1-mediated R-loop resolution at microsatellite loci as a prerequisite for cancer cell proliferation. *Nature communications*, 14(1), 4521.

Liu Z, et al. (2023) CRISPR-Cas13d effectively targets SARS-CoV-2 variants, including Delta and Omicron, and inhibits viral infection. *MedComm*, 4(1), e208.

Peng KL, et al. (2022) Miat and interacting protein Metadherin maintain a stem-like niche to promote medulloblastoma tumorigenesis and treatment resistance. *Proceedings of the National Academy of Sciences of the United States of America*, 119(37), e2203738119.

Lin X, et al. (2021) A comprehensive analysis and resource to use CRISPR-Cas13 for broad-spectrum targeting of RNA viruses. *Cell reports. Medicine*, 2(4), 100245.

Zhang Y, et al. (2021) Optimized RNA-targeting CRISPR/Cas13d technology outperforms shRNA in identifying functional circRNAs. *Genome biology*, 22(1), 41.

Chuang YF, et al. (2021) Methods for in vitro CRISPR/CasRx-Mediated RNA Editing. *Frontiers in cell and developmental biology*, 9, 667879.

Bi D, et al. (2021) CRISPR/Cas13d-mediated efficient KDM5B mRNA knockdown in porcine somatic cells and parthenogenetic embryos. *Reproduction (Cambridge, England)*, 162(2), 149.

Nguyen H, et al. (2021) Efficient Inhibition of HIV Using CRISPR/Cas13d Nuclease System. *Viruses*, 13(9).

Abbott TR, et al. (2020) Development of CRISPR as an Antiviral Strategy to Combat SARS-CoV-2 and Influenza. *Cell*, 181(4), 865.

Yi W, et al. (2020) CRISPR-assisted detection of RNA-protein interactions in living cells. *Nature methods*, 17(7), 685.