

Resource Summary Report

Generated by [NIF](#) on Jul 29, 2026

pCR4-24XPP7SL

RRID:Addgene_31864

Type: Plasmid

Proper Citation

RRID:Addgene_31864

Plasmid Information

URL: <http://www.addgene.org/31864>

Proper Citation: RRID:Addgene_31864

Insert Name: 24xPP7 Stem Loop Cassette

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21512033](#)

Vector Backbone Description: Vector Backbone:pCR4blunt; Vector Types:; Bacterial Resistance:Ampicillin

Comments: The 24xPP7 stem loop cassettes in this plasmid were generated from two non-identical stem-loops to reduce unnecessary redundancy and the chance of recombination in bacteria. The sequence for a single cassette (with the two non-identical stem-loops in uppercase) is:

taaggtagcctaattgcctagaaaGGAGCAGACGATATGGCGTCGCTCCctgcaggtcgactctagaaa-
CCAGCAGAGCATATGGGCTCGCTGGctgcagtattcccggttcatt

Plasmid Name: pCR4-24XPP7SL

Record Creation Time: 20220422T222138+0000

Record Last Update: 20260725T074546+0000

Ratings and Alerts

No rating or validation information has been found for pCR4-24XPP7SL.

No alerts have been found for pCR4-24XPP7SL.

Data and Source Information

Usage and Citation Metrics

We found 15 mentions in open access literature.

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

Chen EC, et al. (2025) Imaging Retroviral RNA Genome Heterodimers Using Bimolecular Fluorescence Complementation (BiFC). *Viruses*, 17(8).

Martin RM, et al. (2023) Live-cell imaging unveils distinct R-loop populations with heterogeneous dynamics. *Nucleic acids research*, 51(20), 11010.

Granik N, et al. (2022) Formation of synthetic RNA protein granules using engineered phage-coat-protein -RNA complexes. *Nature communications*, 13(1), 6811.

Shao B, et al. (2021) Single-cell measurement of plasmid copy number and promoter activity. *Nature communications*, 12(1), 1475.

Suzuki S, et al. (2021) DMP-1 promoter-associated antisense strand non-coding RNA, panRNA-DMP-1, physically associates with EGFR to repress EGF-induced squamous cell carcinoma migration. *Molecular and cellular biochemistry*, 476(4), 1673.

Chen EC, et al. (2021) Visualizing Rous Sarcoma Virus Genomic RNA Dimerization in the Nucleus, Cytoplasm, and at the Plasma Membrane. *Viruses*, 13(5).

Wang S, et al. (2021) Nuclear export and translation of circular repeat-containing intronic RNA in C9ORF72-ALS/FTD. *Nature communications*, 12(1), 4908.

Katz N, et al. (2021) Overcoming the design, build, test bottleneck for synthesis of nonrepetitive protein-RNA cassettes. *Nature communications*, 12(1), 1576.

Vítor AC, et al. (2019) Single-molecule imaging of transcription at damaged chromatin. *Science advances*, 5(1), eaau1249.

Li J, et al. (2019) Single-Molecule Nanoscopy Elucidates RNA Polymerase II Transcription at Single Genes in Live Cells. *Cell*, 178(2), 491.

Pizzinga M, et al. (2019) Translation factor mRNA granules direct protein synthetic capacity to regions of polarized growth. *The Journal of cell biology*, 218(5), 1564.

Vařková Hausnerová V, et al. (2017) Chromatin decondensation is accompanied by a transient increase in transcriptional output. *Biology of the cell*, 109(1), 65.

Rino J, et al. (2015) Single-Molecule Imaging of RNA Splicing in Live Cells. *Methods in enzymology*, 558, 571.

Lin Y, et al. (2015) Combinatorial gene regulation by modulation of relative pulse timing. *Nature*, 527(7576), 54.

Ochiai H, et al. (2014) Stochastic promoter activation affects Nanog expression variability in mouse embryonic stem cells. Scientific reports, 4, 7125.