

Resource Summary Report

Generated by [RRID](#) on Aug 26, 2026

pUCmini-iCAP-AAV.MaCPNS2

RRID:Addgene_185137

Type: Plasmid

Proper Citation

RRID:Addgene_185137

Plasmid Information

URL: <http://www.addgene.org/185137>

Proper Citation: RRID:Addgene_185137

Insert Name: Synthetic construct isolate AAV-MaCPNS2 VP1 gene

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:35643078](#)

Vector Backbone Description: Vector Backbone:pUC57-mini; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: Please note that this is a non-standard rep-cap construct. It uses a tTA-TRE amplification loop to increase Capsid expression and AAV production. We find that this system increases AAV titers 1.5-5 fold (Ben Deverman, Bryan Simpson and Paul Patterson, unpublished data). This is a tet-off system, so no dox or tet is needed to turn it on. It can be used like any other rep-cap plasmid. This system should only present a problem if the rAAV genome to be packaged has a tet responsive element that directs expression of a protein that affected the health of the production cells. This work supported by NIH BRAIN Initiative grant UF1MH128336 . The introduction of an XbaI restriction site for ease of cloning introduces a K449R mutation, which does not have an overt effect on vector production or transduction.

Plasmid Name: pUCmini-iCAP-AAV.MaCPNS2

Record Creation Time: 20220617T080234+0000

Record Last Update: 20260815T082310+0000

Ratings and Alerts

No rating or validation information has been found for pUCmini-iCAP-AAV.MaCPNS2.

No alerts have been found for pUCmini-iCAP-AAV.MaCPNS2.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Radukic MT, et al. (2026) Engineering of High-Yield Recombinant Adeno-Associated Virus Producer Plasmids. *Biotechnology journal*, 21(1), e70179.

Zhao Y, et al. (2026) Gut pathogen *Clostridium symbiosum* rewires macrophage succinylation to drive enteric neuron loss in inflammatory bowel disease. *Cell host & microbe*, 34(4), 620.

Nagao K, et al. (2025) Adeno-associated viruses escort nanomaterials to specific cells and tissues. *bioRxiv : the preprint server for biology*.

Zhong S, et al. (2025) Ultrabright chemical labeling enables rapid neural connectivity profiling in large tissue samples. *Neuron*.

Coughlin GM, et al. (2025) Spatial genomics of AAV vectors reveals mechanism of transcriptional crosstalk that enables targeted delivery of large genetic cargo. *Nature biotechnology*.

Wang Y, et al. (2025) Bi-directional communication between intrinsic enteric neurons and ILC2s inhibits host defense against helminth infection. *Immunity*, 58(2), 465.