

Resource Summary Report

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

pUCmini-iCAP-AAV.MaCPNS1

RRID:Addgene_185136

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/185136>

Proper Citation: RRID:Addgene_185136

Insert Name: Synthetic construct isolate AAV-MaCPNS1 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 We find that this system increases AAV titers 1.5-5 fold (Ben Deverman, Bryan Simpson and Paul Patterson, unpublished data).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.MaCPNS1

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.MaCPNS1.

No alerts have been found for pUCmini-iCAP-AAV.MaCPNS1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 3 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.

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

Wang Y, et al. (2025) A key role of PIEZO2 mechanosensitive ion channel in adipose sensory innervation. Cell metabolism, 37(4), 1001.