

Resource Summary Report

Generated by [kravitz2](#) on Jul 30, 2026

pUCmini-iCAP-PHP.eB

RRID:Addgene_103005

Type: Plasmid

Proper Citation

RRID:Addgene_103005

Plasmid Information

URL: <http://www.addgene.org/103005>

Proper Citation: RRID:Addgene_103005

Insert Name: Synthetic construct isolate AAV-PHP.eB VP1 gene

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:28671695](#)

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 We find that this system increases AAV titers 1.5-5 fold (Ben Deverman, Bryan Simpson and Paul Patterson, unpublished data).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. 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-PHP.eB

Record Creation Time: 20220422T221458+0000

Record Last Update: 20260725T073353+0000

Ratings and Alerts

No rating or validation information has been found for pUCmini-iCAP-PHP.eB.

No alerts have been found for pUCmini-iCAP-PHP.eB.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 121 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Paul S, et al. (2025) Staufen2 dysregulation in neurodegenerative disease. The Journal of biological chemistry, 301(3), 108316.

Luo N, et al. (2025) An engineered adeno-associated virus mediates efficient blood-brain barrier penetration with enhanced neurotropism and reduced hepatotropism. Journal of controlled release : official journal of the Controlled Release Society, 379, 303.

Zhou M, et al. (2025) AIF3 splicing variant elicits mitochondrial malfunction via the concurrent dysregulation of electron transport chain and glutathione-redox homeostasis. Nature communications, 16(1), 1804.

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.

Kanaya HJ, et al. (2025) Isoflurane activates the type 1 ryanodine receptor to induce anesthesia in mice. PLoS biology, 23(6), e3003172.

Ramani B, et al. (2025) CRISPR screening by AAV episome-sequencing (CrAAVe-seq): a scalable cell-type-specific in vivo platform uncovers neuronal essential genes. Nature neuroscience.

Liu Z, et al. (2025) Regulation of Sleep Amount by CRT1 via Transcription of Crh in Mice. The Journal of neuroscience : the official journal of the Society for Neuroscience, 45(5).

Lalanne JB, et al. (2025) Extensive length and homology dependent chimerism in pool-packaged AAV libraries. bioRxiv : the preprint server for biology.

Ando D, et al. (2025) Decoding Codon Bias: The Role of tRNA Modifications in Tissue-Specific Translation. International journal of molecular sciences, 26(2).

Liu TM, et al. (2025) Dysregulation of AGO2-miRNA dynamics underlies the AGO2-associated Lessel-Kreienkamp syndrome. Nucleic acids research, 53(19).

Velazquez-Rivera E, et al. (2025) Specific targeting of brain endothelial cells using enhancer AAV vectors. *Neuron*, 113(10), 1562.

Ben-Simon Y, et al. (2025) A suite of enhancer AAVs and transgenic mouse lines for genetic access to cortical cell types. *Cell*, 188(11), 3045.

Anderson CJ, et al. (2025) Viral vector-mediated SLC9A6 gene replacement reduces cerebellar dysfunction in the shaker rat model of Christianson syndrome. *bioRxiv : the preprint server for biology*.

Yin X, et al. (2025) Calcineurin governs baseline and homeostatic regulations of non-rapid eye movement sleep in mice. *Proceedings of the National Academy of Sciences of the United States of America*, 122(4), e2418317122.

Zhao X, et al. (2025) Alzheimer's disease protective allele of Clusterin modulates neuronal excitability through lipid-droplet-mediated neuron-glia communication. *Molecular neurodegeneration*, 20(1), 51.

Shen T, et al. (2025) GADD45G operates as a pathological sensor orchestrating reactive gliosis and neurodegeneration. *Neuron*, 113(13), 2176.

Zhou S, et al. (2025) PP2Ac[?] regulates sleep amount and sleep homeostasis in mice. *Communications biology*, 8(1), 1018.

Gandelman M, et al. (2025) Targeting STAU1 prevents p53 apoptotic signaling in neurodegeneration. *Cell death & disease*, 16(1), 761.

He J, et al. (2025) Machine learning identification of enhancers in the rhesus macaque genome. *Neuron*, 113(10), 1548.

Finneran DJ, et al. (2025) Mature tau pathology is not improved by interfering with interleukin-1 receptor signaling in two mouse models of tauopathy. *PloS one*, 20(11), e0335409.