

Resource Summary Report

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

pSico

RRID:Addgene_11578

Type: Plasmid

Proper Citation

RRID:Addgene_11578

Plasmid Information

URL: <http://www.addgene.org/11578>

Proper Citation: RRID:Addgene_11578

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:15240889](#)

Vector Backbone Description: Backbone Size:7566; Vector Backbone:pSico; Vector Types:Mammalian Expression, Lentiviral, RNAi, Cre/Lox; Bacterial Resistance:Ampicillin

Comments: pSico allows for conditional (Cre-Lox), stable expression of shRNAs for RNA interference in cells and transgenic mice. Addition of Cre TURNS ON shRNA expression. The shRNA coding oligos have to be cloned into the HpaI and XhoI restriction sites. Oligo design information can be found on the author's map or on <http://web.mit.edu/jacks-lab/> (the Jacks Lab website)

Plasmid Name: pSico

Record Creation Time: 20220422T221606+0000

Record Last Update: 20260725T073551+0000

Ratings and Alerts

No rating or validation information has been found for pSico.

No alerts have been found for pSico.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 29 mentions in open access literature.

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

Cui L, et al. (2024) Streptococcus pneumoniae extracellular vesicles aggravate alveolar epithelial barrier disruption via autophagic degradation of OCLN (occludin). Autophagy, 20(7), 1577.

Nong Y, et al. (2023) UBE3A and transsynaptic complex NRXN1-CBLN1-GluD1 in a hypothalamic VMHvl-arcuate feedback circuit regulates aggression. bioRxiv : the preprint server for biology.

Delgado RN, et al. (2022) Individual human cortical progenitors can produce excitatory and inhibitory neurons. Nature, 601(7893), 397.

Bandler RC, et al. (2022) Single-cell delineation of lineage and genetic identity in the mouse brain. Nature, 601(7893), 404.

Lundquist AJ, et al. (2022) Knockdown of Astrocytic Monocarboxylate Transporter 4 in the Motor Cortex Leads to Loss of Dendritic Spines and a Deficit in Motor Learning. Molecular neurobiology, 59(2), 1002.

Lu L, et al. (2021) A Core Omnigenic Non-coding Trait Governing Dex-Induced Osteoporotic Effects Identified Without DEXA. Frontiers in pharmacology, 12, 750959.

Pallarès-Masmitjà M, et al. (2021) Find and cut-and-transfer (FiCAT) mammalian genome engineering. Nature communications, 12(1), 7071.

Ciampricotti M, et al. (2021) Rlf-Mycl Gene Fusion Drives Tumorigenesis and Metastasis in a Mouse Model of Small Cell Lung Cancer. Cancer discovery, 11(12), 3214.

Misra S, et al. (2021) Periostin/Filamin-A: A Candidate Central Regulatory Axis for Valve Fibrogenesis and Matrix Compaction. Frontiers in cell and developmental biology, 9, 649862.

Pothula S, et al. (2021) Cell-type specific modulation of NMDA receptors triggers antidepressant actions. Molecular psychiatry, 26(9), 5097.

Zhang L, et al. (2021) Small Extracellular Vesicles Control Dendritic Spine Development through Regulation of HDAC2 Signaling. The Journal of neuroscience : the official journal of the Society for Neuroscience, 41(17), 3799.

Tomorsky J, et al. (2020) Precise levels of nectin-3 are required for proper synapse formation in postnatal visual cortex. Neural development, 15(1), 13.

Gerhard DM, et al. (2020) GABA interneurons are the cellular trigger for ketamine's rapid antidepressant actions. The Journal of clinical investigation, 130(3), 1336.

Hsieh CL, et al. (2020) MIWI prevents aneuploidy during meiosis by cleaving excess satellite RNA. The EMBO journal, 39(16), e103614.

Zhao H, et al. (2020) miR-181b-5p inhibits endothelial-mesenchymal transition in monocrotaline-induced pulmonary arterial hypertension by targeting endocan and TGFBR1. *Toxicology and applied pharmacology*, 386, 114827.

Zhao H, et al. (2020) miR-181a/b-5p ameliorates inflammatory response in monocrotaline-induced pulmonary arterial hypertension by targeting endocan. *Journal of cellular physiology*, 235(5), 4422.

Oh SJ, et al. (2019) Ultrasonic Neuromodulation via Astrocytic TRPA1. *Current biology : CB*, 29(20), 3386.

Ribic A, et al. (2019) Synapse-Selective Control of Cortical Maturation and Plasticity by Parvalbumin-Autonomous Action of SynCAM 1. *Cell reports*, 26(2), 381.

Kosmidis S, et al. (2018) RbAp48 Protein Is a Critical Component of GPR158/OCN Signaling and Ameliorates Age-Related Memory Loss. *Cell reports*, 25(4), 959.

Dillon GM, et al. (2017) CLASP2 Links Reelin to the Cytoskeleton during Neocortical Development. *Neuron*, 93(6), 1344.