

Resource Summary Report

Generated by [RRID](#) on Sep 1, 2026

[pcDNA3.1-p300](#)

RRID:Addgene_23252

Type: Plasmid

Proper Citation

RRID:Addgene_23252

Plasmid Information

URL: <http://www.addgene.org/23252>

Proper Citation: RRID:Addgene_23252

Insert Name: p300

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:12456660](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5428; Vector Backbone:pcDNA3.1 (-); Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pcDNA3.1-p300

Record Creation Time: 20220422T222103+0000

Record Last Update: 20260829T080223+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3.1-p300.

No alerts have been found for pcDNA3.1-p300.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 46 mentions in open access literature.

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

Ruggiero-Ruff RE, et al. (2026) Discovery proteomics identification of factors contributing to gonadotropin ? expression. *Endocrinology*, 167(8).

Mousavi N, et al. (2025) P3 site-directed mutagenesis: An efficient method based on primer pairs with 3'-overhangs. *The Journal of biological chemistry*, 301(3), 108219.

Ononye O, et al. (2025) Biochemical impact of p300-mediated acetylation of replication protein A: Implications for DNA metabolic pathway choice. *The Journal of biological chemistry*, 301(6), 110250.

Zhou W, et al. (2025) Proteasome inhibition induces DNA methylation alteration by attenuating the synthesis of DNA methyltransferase 1 and 3B in colorectal cancer. *Scientific reports*, 15(1), 8534.

Yang XJ, et al. (2025) P3a site-specific and cassette mutagenesis for seamless protein, RNA and plasmid engineering. *Genes & cancer*, 16, 34.

Varela-Castillo P, et al. (2025) Highly Efficient Site-Specific and Cassette Mutagenesis of Plasmids Harboring GC-Rich Sequences. *Cells*, 14(24).

Kolling LJ, et al. (2025) The superficial tufted and mitral cell output neurons of the mouse olfactory bulb have dual roles in insulin sensing. *bioRxiv : the preprint server for biology*.

Yu P, et al. (2024) The incorporation of acetylated LAP-TGF-?1 proteins into exosomes promotes TNBC cell dissemination in lung micro-metastasis. *Molecular cancer*, 23(1), 82.

Shin DH, et al. (2023) Oncogenic KRAS mutation confers chemoresistance by upregulating SIRT1 in non-small cell lung cancer. *Experimental & molecular medicine*, 55(10), 2220.

Yu D, et al. (2023) Structural mechanism of BRD4-NUT and p300 bipartite interaction in propagating aberrant gene transcription in chromatin in NUT carcinoma. *Nature communications*, 14(1), 378.

Kolling LJ, et al. (2022) Modulating the Excitability of Olfactory Output Neurons Affects Whole-Body Metabolism. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 42(30), 5966.

Portuguez AS, et al. (2022) Ep300 sequestration to functionally distinct glucocorticoid receptor binding loci underlie rapid gene activation and repression. *Nucleic acids research*, 50(12), 6702.

Schwartz AB, et al. (2021) Olfactory bulb-targeted quantum dot (QD) bioconjugate and Kv1.3 blocking peptide improve metabolic health in obese male mice. *Journal of neurochemistry*, 157(6), 1876.

Chang CC, et al. (2021) Histone acetyltransferase p300 mediates the upregulation of CTEN induced by the activation of EGFR signaling in cancer cells. *Biochemical and*

biophysical research communications, 534, 53.

Li W, et al. (2021) The P300/XBP1s/Herpud1 axis promotes macrophage M2 polarization and the development of choroidal neovascularization. *Journal of cellular and molecular medicine*, 25(14), 6709.

Leonen CJA, et al. (2021) Sumoylation of the human histone H4 tail inhibits p300-mediated transcription by RNA polymerase II in cellular extracts. *eLife*, 10.

Son SM, et al. (2020) Leucine regulates autophagy via acetylation of the mTORC1 component raptor. *Nature communications*, 11(1), 3148.

Son SM, et al. (2019) Leucine Signals to mTORC1 via Its Metabolite Acetyl-Coenzyme A. *Cell metabolism*, 29(1), 192.

Li J, et al. (2019) Muscle A-kinase-anchoring protein-?-bound calcineurin toggles active and repressive transcriptional complexes of myocyte enhancer factor 2D. *The Journal of biological chemistry*, 294(7), 2543.

Cheng Q, et al. (2019) p300 mediates the histone acetylation of ORMDL3 to affect airway inflammation and remodeling in asthma. *International immunopharmacology*, 76, 105885.