

Resource Summary Report

Generated by [NIF](#) on Aug 6, 2026

pBABE-puro-GFP-progerin

RRID:Addgene_17663

Type: Plasmid

Proper Citation

RRID:Addgene_17663

Plasmid Information

URL: <http://www.addgene.org/17663>

Proper Citation: RRID:Addgene_17663

Insert Name: GFP-D50 lamin A

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:18311132](#)

Vector Backbone Description: Backbone Size:5200; Vector Backbone:pBABE-puro; Vector Types:Mammalian Expression, Retroviral; Bacterial Resistance:Ampicillin

Comments: This vector was generated by cloning the NheI–BamHI fragment from pEGFP–D50 lamin A into the BamHI site of the pBABE-puro vector after filling of the ends. This plasmid exists as a dimer in our stock. Dimerization often does not impact plasmid function, but may reduce transformation efficiencies. If you need the monomeric version, you could try linearizing, gel extracting, re-ligating, and transforming the plasmid.

Plasmid Name: pBABE-puro-GFP-progerin

Relevant Mutation: Delta 50

Record Creation Time: 20220422T222020+0000

Record Last Update: 20260801T080858+0000

Ratings and Alerts

No rating or validation information has been found for pBABE-puro-GFP-progerin.

No alerts have been found for pBABE-puro-GFP-progerin.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 21 mentions in open access literature.

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

Balafouti S, et al. (2025) Tension-sensitive LINC-RhoA signaling prevents chromatin bridge breakage in cytokinesis. *The EMBO journal*, 44(20), 5834.

Dzianisava V, et al. (2025) Selection of specific and efficient siRNAs in new cellular model for Hutchinson-Gilford progeria syndrome therapy. *Molecular therapy. Nucleic acids*, 36(4), 102727.

Ziegler DV, et al. (2024) Cholesterol biosynthetic pathway induces cellular senescence through ERR?. *npj aging*, 10(1), 5.

Herrera I, et al. (2023) Lamin A upregulation reorganizes the genome during rod photoreceptor degeneration. *Cell death & disease*, 14(10), 701.

Coll-Bonfill N, et al. (2023) Progerin induces a phenotypic switch in vascular smooth muscle cells and triggers replication stress and an aging-associated secretory signature. *GeroScience*, 45(2), 965.

Sanders JT, et al. (2022) Loops, topologically associating domains, compartments, and territories are elastic and robust to dramatic nuclear volume swelling. *Scientific reports*, 12(1), 4721.

Jiang Y, et al. (2022) Progerin-Induced Impairment in Wound Healing and Proliferation in Vascular Endothelial Cells. *Frontiers in aging*, 3, 844885.

Bin Imtiaz MK, et al. (2022) Human neural progenitors establish a diffusion barrier in the endoplasmic reticulum membrane during cell division. *Development (Cambridge, England)*, 149(20).

von Kleeck R, et al. (2022) Progerin mislocalizes myocardin-related transcription factor in Hutchinson-Guilford Progeria syndrome. *Vascular biology (Bristol, England)*, 4(1), 1.

Frankel D, et al. (2022) miR-376a-3p and miR-376b-3p overexpression in Hutchinson-Gilford progeria fibroblasts inhibits cell proliferation and induces premature senescence. *iScience*, 25(2), 103757.

Han M, et al. (2021) ZMPSTE24 Regulates SARS-CoV-2 Spike Protein-enhanced Expression of Endothelial PAI-1. *American journal of respiratory cell and molecular biology*, 65(3), 300.

Bin Imtiaz MK, et al. (2021) Declining lamin B1 expression mediates age-dependent decreases of hippocampal stem cell activity. *Cell stem cell*, 28(5), 967.

Machiela E, et al. (2020) The Interaction of Aging and Cellular Stress Contributes to Pathogenesis in Mouse and Human Huntington Disease Neurons. *Frontiers in aging neuroscience*, 12, 524369.

Renkawitz J, et al. (2019) Nuclear positioning facilitates amoeboid migration along the path of least resistance. *Nature*, 568(7753), 546.

Griveau A, et al. (2018) Targeting the phospholipase A2 receptor ameliorates premature aging phenotypes. *Aging cell*, 17(6), e12835.

Choi H, et al. (2018) Expression of the Hutchinson-Gilford Progeria Mutation Leads to Aberrant Dentin Formation. *Scientific reports*, 8(1), 15368.

Pacheco LM, et al. (2014) Progerin expression disrupts critical adult stem cell functions involved in tissue repair. *Aging*, 6(12), 1049.

Chen ZJ, et al. (2014) Dysregulated interactions between lamin A and SUN1 induce abnormalities in the nuclear envelope and endoplasmic reticulum in progeric laminopathies. *Journal of cell science*, 127(Pt 8), 1792.

Villa-Bellosta R, et al. (2013) Defective extracellular pyrophosphate metabolism promotes vascular calcification in a mouse model of Hutchinson-Gilford progeria syndrome that is ameliorated on pyrophosphate treatment. *Circulation*, 127(24), 2442.

Yu KR, et al. (2013) MicroRNA-141-3p plays a role in human mesenchymal stem cell aging by directly targeting ZMPSTE24. *Journal of cell science*, 126(Pt 23), 5422.