

Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

pEGFP-puro

RRID:Addgene_45561

Type: Plasmid

Proper Citation

RRID:Addgene_45561

Plasmid Information

URL: <http://www.addgene.org/45561>

Proper Citation: RRID:Addgene_45561

Insert Name: Puromycin N-acetyl transferase

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:11515370](#)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:4731; Vector Backbone:pEGFP-C1; Vector Types:Mammalian Expression, Bifunctional selection protein; Bacterial Resistance:Ampicillin

Comments: Plasmid pEGFP-puro was constructed by PCR amplification of PuroR coding sequences from pPur (Clontech Laboratories, Palo Alto CA, USA) using upstream (5'-AAGTCCGGACTCAGATCTAGGAGACGACCTTCCATGACCGAGT-3') and downstream (5'-GTTATCTAGATCCGGTGGATCCCGGGCACCGGGCTTGCGGGTCATGCACCA-3') primers, digestion of the PCR product with BglII and BamHI, and ligation into BglII/BamHI digested pEGFP-C1 (Clontech Laboratories). To construct a fusion protein containing both EGFP and PuroR sequences, PuroR coding sequences were ligated into an existing expression cassette for EGFP. The resulting fusion protein was designated EGFP-puro and is contained in plasmid pEGFP-puro. This plasmid contains the strong human cytomegalovirus immediate early promoter (Phcmv), the EGFP puro open reading frame, and the simian virus 40 (SV40) polyadenylation signal. The EGFP-puro protein contains the first 245 amino acids of EGFP. The C-terminal five amino acids of EGFP were deleted and replaced by four linker-encoded amino acids, followed by the complete 200-amino-acid PuroR sequence. The C-terminus is formed by 11 amino acids encoded by vector sequences. The resulting fusion protein (EGFP-puro) confers both green fluorescence and resistance to puromycin when expressed in mammalian cells.

Plasmid Name: pEGFP-puro

Record Creation Time: 20220422T222235+0000

Record Last Update: 20260815T081525+0000

Ratings and Alerts

No rating or validation information has been found for pEGFP-puro.

No alerts have been found for pEGFP-puro.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 18 mentions in open access literature.

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

Kotey EN, et al. (2026) A newly developed eGFP-traceable recombinant rhesus lymphocryptovirus, a tool to study viral infection and replication in vitro and ex vivo, confirms gp350 as key for viral entry. Journal of virology, 100(7), e0053726.

Ossola C, et al. (2025) Adducins regulate morphology and fate of neural progenitors during neocortical neurogenesis. Cell reports, 44(9), 116276.

Wang Y, et al. (2025) TRIM29 promotes bladder cancer invasion by regulating the intermediate filament network and focal adhesion. Oncogene, 44(42), 4047.

Kim N, et al. (2024) Deep learning models to predict the editing efficiencies and outcomes of diverse base editors. Nature biotechnology, 42(3), 484.

Kinnear C, et al. (2024) Myosin inhibitor reverses hypertrophic cardiomyopathy in genotypically diverse pediatric iPSC-cardiomyocytes to mirror variant correction. Cell reports. Medicine, 5(5), 101520.

Huang S, et al. (2024) Cellular transfection using rapid decrease in hydrostatic pressure. Scientific reports, 14(1), 4631.

Triller J, et al. (2024) An Enhanced Retroviral Vector for Efficient Genetic Manipulation and Selection in Mammalian Cells. Biomolecules, 14(9).

Huang S, et al. (2024) An efficient low cost means of biophysical gene transfection in primary cells. Scientific reports, 14(1), 13179.

Schembs L, et al. (2022) The ciliary gene INPP5E confers dorsal telencephalic identity to human cortical organoids by negatively regulating Sonic hedgehog signaling. Cell reports, 39(7), 110811.

- Perrin L, et al. (2022) Invadopodia enable cooperative invasion and metastasis of breast cancer cells. *Communications biology*, 5(1), 758.
- Doray B, et al. (2021) Inactivation of the three GGA genes in HeLa cells partially compromises lysosomal enzyme sorting. *FEBS open bio*, 11(2), 367.
- Collias D, et al. (2020) A positive, growth-based PAM screen identifies noncanonical motifs recognized by the *S. pyogenes* Cas9. *Science advances*, 6(29), eabb4054.
- Liu L, et al. (2018) Recycling of Golgi glycosyltransferases requires direct binding to coatomer. *Proceedings of the National Academy of Sciences of the United States of America*, 115(36), 8984.
- Stanley WJ, et al. (2017) Differential regulation of pro-inflammatory cytokine signalling by protein tyrosine phosphatases in pancreatic β -cells. *Journal of molecular endocrinology*, 59(4), 325.
- Li Z, et al. (2017) Extracellular Interactions between Hepatitis C Virus and Secreted Apolipoprotein E. *Journal of virology*, 91(15).
- Racz R, et al. (2014) DNAVaxDB: the first web-based DNA vaccine database and its data analysis. *BMC bioinformatics*, 15 Suppl 4(Suppl 4), S2.
- Kranz D, et al. (2014) A synthetic lethal screen identifies FAT1 as an antagonist of caspase-8 in extrinsic apoptosis. *The EMBO journal*, 33(3), 181.
- Shen T, et al. (2013) AP-1/IRF-3 Targeted Anti-Inflammatory Activity of Andrographolide Isolated from *Andrographis paniculata*. *Evidence-based complementary and alternative medicine : eCAM*, 2013, 210736.