

Resource Summary Report

Generated by [RRID](#) on Aug 23, 2026

pPAGFP-N1

RRID:Addgene_11909

Type: Plasmid

Proper Citation

RRID:Addgene_11909

Plasmid Information

URL: <http://www.addgene.org/11909>

Proper Citation: RRID:Addgene_11909

Insert Name: pPAGFP-N1

Organism: Aequorea victoria

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:12228718](#)

Vector Backbone Description: Backbone Size:4733; Vector Backbone:pEGFP-N1; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Comments: The fluorescent protein encoding region contains one of the three substitutions (A206K) suggested by Dr. Roger Tsien. This mutation disrupts fluorescent protein dimerization even at high concentrations. The mutation does not seem to have much effect on the fluorescent properties of the CFP, GFP and YFP versions, so hopefully it will not affect PAGFP too much. The PAGFP A206K mutant does not display obvious fluorescent differences compared with the original, but please bear in mind that I haven't characterized it to the same extent. The citation for the A206K mutation in fluorescent proteins is Science 2002 296:913.

Plasmid Name: pPAGFP-N1

Relevant Mutation: These plasmids are essentially the same as the Clontech pEGFP-N1 version with four mutations (L64F/T65S/V163A/T203H). The PAGFP also contains an A206K mutation to disrupt dimerization

Record Creation Time: 20220422T221623+0000

Record Last Update: 20260815T080310+0000

Ratings and Alerts

No rating or validation information has been found for pPAGFP-N1.

No alerts have been found for pPAGFP-N1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 8 mentions in open access literature.

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

Murata D, et al. (2024) mCAUSE: Prioritizing mitochondrial targets that alleviate pancreatic cancer cell phenotypes. *iScience*, 27(9), 110880.

Scott ZC, et al. (2023) Endoplasmic reticulum network heterogeneity guides diffusive transport and kinetics. *Biophysical journal*, 122(15), 3191.

Chang YW, et al. (2023) Spatial and temporal dynamics of ATP synthase from mitochondria toward the cell surface. *Communications biology*, 6(1), 427.

Boeri L, et al. (2020) Advantages and limitations of a supernegative GFP in facilitating MyoD intracellular tracking. *Methods and applications in fluorescence*, 8(2), 025007.

S??bastien M, et al. (2020) Dynamics of triadin, a muscle-specific triad protein, within sarcoplasmic reticulum subdomains. *Molecular biology of the cell*, 31(4), 261.

Lee S, et al. (2019) Engineering Photoactivatability in Genetically Encoded Voltage and pH Indicators. *Frontiers in cellular neuroscience*, 13, 482.

Gong X, et al. (2018) KIF13A-regulated RhoB plasma membrane localization governs membrane blebbing and blebby amoeboid cell migration. *The EMBO journal*, 37(17).

Milde S, et al. (2013) Subcellular localization determines the stability and axon protective capacity of axon survival factor Nmnat2. *PLoS biology*, 11(4), e1001539.