

Resource Summary Report

Generated by [NIF](#) on Aug 29, 2026

piRFP670-N1

RRID:Addgene_45457

Type: Plasmid

Proper Citation

RRID:Addgene_45457

Plasmid Information

URL: <http://www.addgene.org/45457>

Proper Citation: RRID:Addgene_45457

Insert Name: iRFP670

Organism: Rhodopseudomonas palustris

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:23770755](#)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:4012; Vector Backbone:pN1; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Comments: For more information on in vivo imaging, please see:
https://www.addgene.org/fluorescent_proteins/in_vivo/

Plasmid Name: piRFP670-N1

Relevant Mutation: T2A, S45T, V116I, D124E, M170L, K180M, D202L, I203V, I219V, R233H, V251I, V254C, Y258F, A283I, F307L relative to RpBphP6

Record Creation Time: 20220422T222234+0000

Record Last Update: 20260829T080557+0000

Ratings and Alerts

No rating or validation information has been found for piRFP670-N1.

No alerts have been found for piRFP670-N1.

Data and Source Information

Usage and Citation Metrics

We found 57 mentions in open access literature.

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

Le Phan TH, et al. (2026) Dispensable players: N-WASP and WASP are not crucial for homology-directed DNA repair. EMBO reports, 27(10), 2798.

Goyal R, et al. (2026) Vesicular Glutamate Release Is Necessary for Neural Tube Formation. The Journal of neuroscience : the official journal of the Society for Neuroscience, 46(11).

Yang X, et al. (2026) Spatial control of genome editing activity enables localized immunotherapy. bioRxiv : the preprint server for biology.

Kim SH, et al. (2026) Remodeling synaptic connections via engineered neuron-astrocyte interactions. Nature communications, 17(1).

Woodward BL, et al. (2025) Inherited deficiency of DIAPH1 identifies a DNA double strand break repair pathway regulated by ??-actin. Nature communications, 16(1), 4491.

Narendradev ND, et al. (2025) Endosomal RFFL ubiquitin ligase regulates mitochondrial morphology by targeting mitofusin 2. Journal of cell science, 138(12).

Masaki K, et al. (2025) MicroRNA-responsive ON-OFF hybrid mRNA switch for precise protein expression control. Molecular therapy. Nucleic acids, 36(3), 102609.

Company C, et al. (2024) Logical design of synthetic cis-regulatory DNA for genetic tracing of cell identities and state changes. Nature communications, 15(1), 897.

Lee HHY, et al. (2024) Inhibition of Aberrantly Overexpressed Polo-like Kinase 4 Is a Potential Effective Treatment for DNA Damage Repair-Deficient Uterine Leiomyosarcoma. Clinical cancer research : an official journal of the American Association for Cancer Research, 30(17), 3904.

Hecht M, et al. (2024) The concerted action of SEPT9 and EPLIN modulates the adhesion and migration of human fibroblasts. Life science alliance, 7(7).

Yokoyama T, et al. (2024) A multicolor suite for deciphering population coding of calcium and cAMP in vivo. Nature methods, 21(5), 897.

Wang P, et al. (2023) A single-shot hyperspectral phasor camera for fast, multi-color fluorescence microscopy. Cell reports methods, 3(4), 100441.

Parker SS, et al. (2023) EVL and MIM/MTSS1 regulate actin cytoskeletal remodeling to promote dendritic filopodia in neurons. The Journal of cell biology, 222(5).

Fujita Y, et al. (2022) Translational recoding by chemical modification of non-AUG start codon ribonucleotide bases. *Science advances*, 8(14), eabm8501.

Leben R, et al. (2022) Two-Photon Excitation Spectra of Various Fluorescent Proteins within a Broad Excitation Range. *International journal of molecular sciences*, 23(21).

Zhang Y, et al. (2022) Polarized NHE1 and SWELL1 regulate migration direction, efficiency and metastasis. *Nature communications*, 13(1), 6128.

Ojima K, et al. (2022) Coordination chemogenetics for activation of GPCR-type glutamate receptors in brain tissue. *Nature communications*, 13(1), 3167.

Fujita Y, et al. (2022) A versatile and robust cell purification system with an RNA-only circuit composed of microRNA-responsive ON and OFF switches. *Science advances*, 8(1), eabj1793.

Teijeira A, et al. (2022) Depletion of Conventional Type-1 Dendritic Cells in Established Tumors Suppresses Immunotherapy Efficacy. *Cancer research*, 82(23), 4373.

Hamilton AM, et al. (2021) Non-canonical Hedgehog signaling regulates spinal cord and muscle regeneration in *Xenopus laevis* larvae. *eLife*, 10.