

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 20, 2026

pmRFP-N1 human cofilin R21Q

RRID:Addgene_51279

Type: Plasmid

Proper Citation

RRID:Addgene_51279

Plasmid Information

URL: <http://www.addgene.org/51279>

Proper Citation: RRID:Addgene_51279

Insert Name: cofilin 1

Organism: Homo sapiens

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:24391794](#)

Vector Backbone Description: Backbone Marker:R.Y. Tsien, PNAS 2002 v99 pp7877–7882; Vector Backbone:pmRFP-N1; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Comments: This cofilin plasmid contains some silent mutations to make it resistant to an siRNA used in the Bamberg lab. The mutations change the wildtype sequence (AAG TCT TCA ACG CCA GAG GAG) into AAG AGC TCA ACC CCA GAG GAG.

Plasmid Name: pmRFP-N1 human cofilin R21Q

Relevant Mutation: R21Q, non-rod-forming mutation that can be used to track cofilin-actin rods in vivo without causing cofilin overexpression artifacts

Record Creation Time: 20220422T222302+0000

Record Last Update: 20260815T081612+0000

Ratings and Alerts

No rating or validation information has been found for pmRFP-N1 human cofilin R21Q.

No alerts have been found for pmRFP-N1 human cofilin R21Q.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Minamide LS, et al. (2023) Visualizing Cofilin-Actin Filaments by Immunofluorescence and CryoEM: Essential Steps for Observing Cofilactin in Cells. Methods in molecular biology (Clifton, N.J.), 2593, 265.

Pearce KM, et al. (2020) G?q-mediated calcium dynamics and membrane tension modulate neurite plasticity. Molecular biology of the cell, 31(7), 683.