

Resource Summary Report

Generated by [NIF](#) on Jul 30, 2026

pAM2991

RRID:Addgene_40248

Type: Plasmid

Proper Citation

RRID:Addgene_40248

Plasmid Information

URL: <http://www.addgene.org/40248>

Proper Citation: RRID:Addgene_40248

Insert Name: One Step Cloning Vector for Overexpression

Organism: *Synechococcus elongatus* PCC 7942

Bacterial Resistance: Spectinomycin and Streptomycin

Defining Citation: [PMID:15775978](#)

Vector Backbone Description: Vector Backbone:pAM2990; Vector Types:Cyanobacteria cloning vector; Bacterial Resistance:Spectinomycin and Streptomycin

Comments: pAM2990 was partially digested with SacI and re-ligated to remove the antihel fragment. The net result is the insertion of the BglII fragment from pAM2255 into BamHI digested pAM1303 in the orientation that Ptrc goes away from the SacI site in pAM1303 (SacI digestion gives a 1.7 KB band). This plasmid can be used as a one-step cloning vector for overexpression.

Plasmid Name: pAM2991

Record Creation Time: 20220422T222209+0000

Record Last Update: 20260725T074642+0000

Ratings and Alerts

No rating or validation information has been found for pAM2991.

No alerts have been found for pAM2991.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Cui Y, et al. (2022) Construction of an artificial consortium of Escherichia coli and cyanobacteria for clean indirect production of volatile platform hydrocarbons from CO₂. Frontiers in microbiology, 13, 965968.

Fang Y, et al. (2018) Engineering and Modulating Functional Cyanobacterial CO₂-Fixing Organelles. Frontiers in plant science, 9, 739.

Cao YQ, et al. (2017) AraBAD Based Toolkit for Gene Expression and Metabolic Robustness Improvement in Synechococcus elongatus. Scientific reports, 7(1), 18059.

Sarnaik A, et al. (2017) Growth engineering of Synechococcus elongatus PCC 7942 for mixotrophy under natural light conditions for improved feedstock production. Biotechnology progress, 33(5), 1182.

Sun Y, et al. (2016) Light Modulates the Biosynthesis and Organization of Cyanobacterial Carbon Fixation Machinery through Photosynthetic Electron Flow. Plant physiology, 171(1), 530.