

Resource Summary Report

Generated by [nidm-terms](#) on Aug 22, 2026

pAC-4CL1

RRID:Addgene_35947

Type: Plasmid

Proper Citation

RRID:Addgene_35947

Plasmid Information

URL: <http://www.addgene.org/35947>

Proper Citation: RRID:Addgene_35947

Insert Name: 4-coumaroyl CoA ligase 1

Organism: Arabidopsis thaliana

Bacterial Resistance: Chloramphenicol

Defining Citation: [PMID:16551366](#)

Vector Backbone Description: Backbone Size:4449; Vector Backbone:pAC; Vector Types:Bacterial Expression, Synthetic Biology; Bacterial Resistance:Chloramphenicol

Comments: Initial gene cloning described in the following: "Exploring Recombinant Flavonoid Biosynthesis in Metabolically Engineered Escherichia coli" (2004)Kevin T. Watts, Pyung Cheon Lee Dr., Claudia Schmidt-Dannert Prof. ChemBioChem. DOI: 10.1002/cbic.200300783

Plasmid Name: pAC-4CL1

Record Creation Time: 20220422T222153+0000

Record Last Update: 20260815T081404+0000

Ratings and Alerts

No rating or validation information has been found for pAC-4CL1.

No alerts have been found for pAC-4CL1.

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 [nidm-terms](#) .

Rodrigues JL, et al. (2022) Challenges in the Heterologous Production of Furanocoumarins in Escherichia coli. Molecules (Basel, Switzerland), 27(21).

Rodrigues JL, et al. (2020) A Combinatorial Approach to Optimize the Production of Curcuminoids From Tyrosine in Escherichia coli. Frontiers in bioengineering and biotechnology, 8, 59.

Couto MR, et al. (2017) Optimization of fermentation conditions for the production of curcumin by engineered Escherichia coli. Journal of the Royal Society, Interface, 14(133).

Afonso MS, et al. (2015) Resveratrol production in bioreactor: Assessment of cell physiological states and plasmid segregational stability. Biotechnology reports (Amsterdam, Netherlands), 5, 7.

Rodrigues JL, et al. (2015) Production of curcuminoids from tyrosine by a metabolically engineered Escherichia coli using caffeic acid as an intermediate. Biotechnology journal, 10(4), 599.