

Resource Summary Report

Generated by [RRID](#) on Aug 22, 2026

MK01

RRID:Addgene_195090

Type: Plasmid

Proper Citation

RRID:Addgene_195090

Plasmid Information

URL: <http://www.addgene.org/195090>

Proper Citation: RRID:Addgene_195090

Insert Name: Replaced lacI gene with chloramphenicol acetyltransferase (cat) selection cassette in the parent strain BW27783.

Organism: n/a

Bacterial Resistance: Chloramphenicol

Defining Citation: [PMID:24382032](#)

Vector Backbone Description: Vector Backbone:n/a; Vector Types:This is a strain, not a plasmid; Bacterial Resistance:Chloramphenicol

Comments: MK01 strain was derived by knocking out the endogenous lacI gene with chloramphenicol acetyltransferase (cat) selection cassette in the parent strain BW27783. The parent strain encodes araC gene but carries a deletion for the arabinose metabolizing genes, ?(araH-araF). The all-or-none response of araBAD promoter (PBAD) response is overcome by inserting a copy of the low-affinity high-capacity transporter, araE, under the control of an arabinose-independent promoter.

Plasmid Name: MK01

Record Creation Time: 20230208T080424+0000

Record Last Update: 20260815T082506+0000

Ratings and Alerts

No rating or validation information has been found for MK01.

No alerts have been found for MK01.

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 [RRID](#) .

Holló G, et al. (2025) A tool for modeling gene regulatory networks (GRN_modeler) and its applications to synthetic biology. Molecular systems biology, 21(11), 1618.

Park JH, et al. (2024) From resonance to chaos by modulating spatiotemporal patterns through a synthetic optogenetic oscillator. Nature communications, 15(1), 7284.