

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

ML43

RRID:Addgene_61922

Type: Plasmid

Proper Citation

RRID:Addgene_61922

Plasmid Information

URL: <http://www.addgene.org/61922>

Proper Citation: RRID:Addgene_61922

Insert Name: none

Bacterial Resistance: None

Defining Citation: [PMID:21925267](#)

Vector Backbone Description: Vector Backbone:none; Vector Types:; Bacterial Resistance:None

Comments: Genotype = cyo ilvE avtA aspC hisG argH metA lysA thrC asnA asnB
Precursor strain = ML42 modified from the parent Escherichia coli C43(DE3) strain
Selective amino acid labeling (and/or requirement) = (Ala#), Ile, Leu*, Tyr#, Val, His, Arg, Met, Lys, Thr, Asn *In the presence of 0.4-1 mM Tyr, tyrB is repressed and Leu is required for growth in minimal medium. This strategy can only be applicable for a short-term cultivation but not suitable for a long-term cultivation for heterologous expression of foreign genes [Methods 55, 370-378 (2011)]. #In the presence of 0.4-1 mM Tyr, tyrB is repressed and Tyr is required for growth in minimal medium. Under these conditions, this strain can also be used for selective labeling of the input Tyr and/or Ala label(s), although minor diffusion of the input label(s) can occur. Note that this strategy can only be applicable for a short-term cultivation but not suitable for a long-term cultivation for heterologous expression of foreign genes [Methods 55, 370-378 (2011)]. Each target gene was deleted from the chromosome of C43 (DE3) E. coli strain using ??-Red recombination system. Supplemental documents contain a list of PCR primers used for verification of each knocked-out gene as well as an image showing PCR results for this strain.

Plasmid Name: ML43

Record Creation Time: 20220422T222355+0000

Record Last Update: 20260808T081933+0000

Ratings and Alerts

No rating or validation information has been found for ML43.

No alerts have been found for ML43.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.