Resource Summary Report

Generated by dkNET on Sep 3, 2026

C321

RRID:Addgene_48999
Type: Plasmid

Proper Citation

RRID:Addgene_48999

Plasmid Information

URL: http://www.addgene.org/48999

Proper Citation: RRID:Addgene_48999

Insert Name: Recoded E. coli genome with all instances of the UAG codon removed, but wild type UAG termination function is not changed

Organism: E. coli

Bacterial Resistance: Ampicillin

Defining Citation: PMID:24136966

Vector Backbone Description: Vector Backbone:E. coli genome; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

Comments: E. coli MG1655 delta(ybhB-bioAB)::[lcI857 N(cro-ea59)::tetR-bla] Delta mutS::zeoR; all 321 UAG codons changed to UAA This strain is mutS-, which causes a spontaneous mutation frequency of ~2E-8. This strain is auxotrophic for d-biotin. Sequence is similar to C321.DA (NCBI accession # NCBI CP006698), except that RF1 is not deleted.

Plasmid Name: C321

Relevant Mutation: See genbank file of C321.DA

Record Creation Time: 20220422T222252+0000

Record Last Update: 20260902T045604+0000

Ratings and Alerts

No rating or validation information has been found for C321.

No alerts have been found for C321.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET .

Chen X, et al. (2021) A linear DNA template-based framework for site-specific unnatural amino acid incorporation. Synthetic and systems biotechnology, 6(3), 192.

Ozer E, et al. (2017) In vitro suppression of two different stop codons. Biotechnology and bioengineering, 114(5), 1065.

Ostrov N, et al. (2016) Design, synthesis, and testing toward a 57-codon genome. Science (New York, N.Y.), 353(6301), 819.