

Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

Syn61

RRID:Addgene_174513

Type: Plasmid

Proper Citation

RRID:Addgene_174513

Plasmid Information

URL: <http://www.addgene.org/174513>

Proper Citation: RRID:Addgene_174513

Insert Name: Recoded E. coli strain without TCG, TCA, or TAG codons

Bacterial Resistance: Streptomycin

Defining Citation: [PMID:31092918](#)

Vector Backbone Description: Vector Backbone:NA; Vector Types:; Bacterial Resistance:Streptomycin

Comments: The compressed genome of Syn61 was designed by systematically replacing the TCG, TCA, and TAG codons with their synonyms AGC, AGT, and TAA, respectively, in all open reading frames. Genotyping primers for presence of synthetic insert in 100k01 in Syn61 strain: GE282 AAAAAGGTCGGGCCGGACGGTC GE283 GCAATAATGGCAGCCACACCTTG

Plasmid Name: Syn61

Record Creation Time: 20220422T222009+0000

Record Last Update: 20260815T081041+0000

Ratings and Alerts

No rating or validation information has been found for Syn61.

No alerts have been found for Syn61.

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 [RRID](#) .

Nyerges A, et al. (2026) Probing the limits of genetic recoding using multi-omics-guided evolution. Nature communications, 17(1).

Voorhees PJ, et al. (2025) Defining serine tRNA knockout as a strategy for effective repression of gene expression in organisms with a recoded genome. Nucleic acids research, 53(1).

Nyerges A, et al. (2024) Synthetic genomes unveil the effects of synonymous recoding. bioRxiv : the preprint server for biology.