

Resource Summary Report

Generated by [NIF](#) on Jul 29, 2026

pBAC-lacZ

RRID:Addgene_13422

Type: Plasmid

Proper Citation

RRID:Addgene_13422

Plasmid Information

URL: <http://www.addgene.org/13422>

Proper Citation: RRID:Addgene_13422

Bacterial Resistance: Chloramphenicol

Defining Citation: [PMID:17406455](#)

Vector Backbone Description: Backbone Size:11151; Vector Backbone:pBAC-lacZ;
Vector Types:Bacterial Expression, Cre/Lox; Bacterial Resistance:Chloramphenicol

Comments: The complete assembled sequence for this plasmid may not be accurate. Addgene suggests sequence verifying the construct before starting your experiments. Bacterial cell-based two-hybrid (B2H) reporter vector. Use 12.5 ug/ml chloramphenicol for growth. The pBAC-lacZ plasmid is a mini-F' that can be replicated in standard E. coli strains, but because it is maintained as a single copy episome, it gives low DNA yields. pBAC-lacZ also contains a second, higher copy number origin of replication (oriV) that is only active in the presence of a trans-acting factor encoded by the trfA gene. Transformax EPI300 cells express trfA from an inducible promoter that we have found is inducible with arabinose. When the trfA gene is induced in Transformax EPI300 cells, the copy number of pBAC-lacZ plasmid is increased in the cells and reasonable yields of plasmid can be obtained using a standard miniprep procedure. Further notes on propagating this plasmid: grow an overnight culture (without arabinose) and then the next morning subculture 1:10 into medium that has a final concentration of arabinose of 1 mM. You then grow this culture for 5 to 6 hours at 37 C and then harvest the DNA.

Plasmid Name: pBAC-lacZ

Record Creation Time: 20220422T221741+0000

Record Last Update: 20260725T073841+0000

Ratings and Alerts

No rating or validation information has been found for pBAC-lacZ.

No alerts have been found for pBAC-lacZ.

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 [NIF](#) .

Granik N, et al. (2022) Formation of synthetic RNA protein granules using engineered phage-coat-protein -RNA complexes. Nature communications, 13(1), 6811.

Gatta V, et al. (2019) Targeting Quorum Sensing: High-Throughput Screening to Identify Novel LsrK Inhibitors. International journal of molecular sciences, 20(12).

Ilina P, et al. (2018) Miniaturized whole-cell bacterial bioreporter assay for identification of quorum sensing interfering compounds. Journal of microbiological methods, 154, 40.

Vukotic M, et al. (2017) Acylglycerol Kinase Mutated in Sengers Syndrome Is a Subunit of the TIM22 Protein Translocase in Mitochondria. Molecular cell, 67(3), 471.

Aurand TC, et al. (2016) Development of a synthetic receptor protein for sensing inflammatory mediators interferon- γ and tumor necrosis factor- α . Biotechnology and bioengineering, 113(3), 492.