

Resource Summary Report

Generated by [SPARC SAWG](#) on Sep 3, 2026

pAT253

RRID:Addgene_40943

Type: Plasmid

Proper Citation

RRID:Addgene_40943

Plasmid Information

URL: <http://www.addgene.org/40943>

Proper Citation: RRID:Addgene_40943

Insert Name: GFP-LacI**

Organism: E. coli

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21724830](#)

Vector Backbone Description: Backbone Marker:Andrew W. Murray Lab, UCSF (Straight, Sedat, & Murray, 1998. PMID: 9813090); Backbone Size:4600; Vector Backbone:pAFS135; Vector Types:Yeast Expression; Bacterial Resistance:Ampicillin

Comments: The plasmid pAFS135 (Straight, Sedat, and Murray, 1998) contains GFP(S65T, V163A)-LacI(P3Y, del C-terminal 11 aa)-SV40 NLS under the control of a HIS3 promoter fragment. To construct pAT123, the HIS3 marker of AFS135 was replaced with a Scal-DraIII fragment from RS405 containing LEU2 (a kind gift from Karine Dubrana and Susan Gasser). The plasmid pAT222 (Addgene plasmid #40942) was obtained by site-directed mutagenesis of pAT123 to create GFP-LacI**, using the primers (base mutations in lowercase): 5'-GTGGCACAgCAACTGGCGGaCAAagggtggcggaTCGTTGCTGATTGGCGTTGCCtCCT-3' and 5'-AGGaGGCAACGCCAATCAGCAACGAtccgccaccTTTGtCCGCCAGTTGcTGTGCCAC- 3'. The LacI** variant was then subcloned into pAFS135 using NotI and XhoI restriction sites to create plasmid pAT253.

Plasmid Name: pAT253

Relevant Mutation: LacI**/LacI2G(4 mutations) (see comment below); lacI-I12 mutation (P3Y); C-terminal 11 amino acids deleted to prevent tetramerization

Record Creation Time: 20220422T222212+0000

Record Last Update: 20260902T045421+0000

Ratings and Alerts

No rating or validation information has been found for pAT253.

No alerts have been found for pAT253.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Chen H, et al. (2018) Dynamic interplay between enhancer-promoter topology and gene activity. Nature genetics, 50(9), 1296.