



pARO180 plasmid in *E. coli*

77123™

Description

This is a mobilizable expression vector encoding the lacZα (lacZ?) peptide which permits visual detection of recombinants. It can also be used as an expression vector in bacteria of the family Enterobacteriaceae, or as a mobilizable suicide vector for site-specific insertional mutagenesis in other bacterial strains. It replicates to high copy number in *E. coli* and *Enterobacter aerogenes*. It contains the basis of mobilization (bom) and origin of transfer (oriT) sequences from RP4. This region can be transferred to another version of pUC vectors by using a MCS restriction site and the unique AlwNI site. This vector also contains priming sites useful for sequencing. The order of major features in this plasmid is: lacZ?/MCS ? pMB1 ori ? AlwNI site ? bla ? oriT/bom. The pARO180 plasmid (ATCC® 77123™) and pARO190 plasmid (ATCC® 77124™) differ in the orientation of the MCS within lacZ?.

Clone type: Vector

Host: *Escherichia coli* DH5α

Shipping information: *Escherichia coli* containing the plasmid

Storage Conditions

Product format: Frozen

Storage conditions: -70°C or colder

Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Vector Information

Construct size (kb): 5.46

Vector name: pARO180 (plasmid)

Type of vector: plasmid

Construction: pUC18, pSUP2021

Cloning sites: HindIII; SphI; PstI; HincII; Sall; XbaI; BamHI; Aval; SmaI; XmaI; KpnI; SacI; EcoRI

Insert detection: lacZ'

Markers: ampR

Promoters: lac

Replicon: pMB1

Growth Conditions

Medium:

ATCC Medium 1227: LB Medium (ATCC medium 1065) with 50 mcg/ml ampicillin

Temperature: 37°C

Handling Procedures

1. Thaw contents of the vial in a 37°C water bath with gentle agitation.
 2. Transfer a loopful to a test tube containing 5 mL LB + 50 µg/mL of ampicillin broth. A loopful of culture can also be streaked on an LB + amp agar plate.
 3. Incubate cultures at 37°C.
 4. Isolate DNA using standard plasmid preparation procedures.
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Notes

Restriction digests of the vector gave the following size bands (in kb): BamHI-5.5; EcoRI-5.5 ; HindIII-5.5 ; PstI-5.5 ; HindIII/EcoRI-5.5.

-ATCC Staff

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: pARO180 plasmid in *E. coli* (ATCC 77123)

References

References and other information relating to this material are available at www.atcc.org.

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