




## Product Sheet


# pJIR418 [JIR1961] (ATCC® 77387™)

### Please read this FIRST



Storage Temp.  
**Store unopened  
vial at 4°C**

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Biosafety Level  
**1**

### Intended Use

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

### Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: pJIR418 [JIR1961] (ATCC® 77387™)

### Shipping Information

Frozen *Escherichia coli* containing the plasmid.

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

## Description

This is a shuttle expression vector for either *Clostridium perfringens* or *Escherichia coli* permitting expression of antibiotic resistance to chloramphenicol (catP) and erythromycin (ermBP) in both hosts. EcoRV and Scal restriction sites can be used for cloning and insertional inactivation of catP and ermBP, respectively. It does not contain an intact beta-lactamase gene.

The standard reverse sequencing primer is not useful in this vector due to the duplication of the 181 bp region between pUC18 sites PvuII and EcoRI.

The order of major features in this plasmid is: 5 lacZ EcoRI/MCS/HindIII 3 lacZ pIP404 ori pIP404 rep HpaI catP SmaI Avall ermBP pMB ori. Location of the major features in this plasmid : lacZ (nt 7345- 310), MCS (nt 1-57), pIP404 ori (approx. nt 1190-1419), pIP404 rep gene (nt 2702-1482), catP (nt 4830-4207), ermBP (nt 5902-5165), pMB1 ori (approx. nt 6780-7000). The vector contains the following restriction sites (position in bp): EcoRI 1; HindIII 57; PvuI 175; FspI 195; NarI 216; Tth111 397; SpeI 3235; NheI 3549; NaeI 3653; HpaI 4206; EcoRV 4723; SmaI 4984; Aval 5059; Scal 5850.

**Designation:** pJIR418 [JIR1961]

## Propagation

1. Open thawed vial according to enclosed instructions or visit [www.atcc.org](http://www.atcc.org) for instructions.
2. Aseptically transfer the entire contents to a 5-6 mL tube containing LB+ 30 µg/mL of chloramphenicol.
3. A loopful of culture can also be streaked on an LB + chloramphenicol agar plate.
4. Incubate cultures at 37°C.
5. Isolate DNA using standard plasmid preparation procedures.

### Growth Conditions

**Temperature:** 37°C

### Medium

ATCC Medium 1065 (see below) plus 30.0 mcg/ml chloramphenicol ATCC Medium 1065: Tryptone (Difco 0123), 10.0 g Yeast Extract (Difco 0127), 5.0 g NaCl, 10.0 g Distilled water, 1.0 L



## Vector Information

**Vector:** pJIR418 (plasmid)

**Promoters:** Promoter lac

**Construction:** pUC18, pIP404 replicon, pJIR229 ermBP, pJIR62 catP

**Marker(s):** cmlR,eryR

**Construct size (kb):** 7.36

**Features: insert detection:** lacZ'

**marker(s):** cmlR, eryR

**promoter:** lac

**replicon:** pMB1, pIP404



## References

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).



## Notes

Restriction digests of the clone gave the following sizes (in kb): HindIII 7.4 ; EcoRI 7.4 ; SmaI 5.0, 2.4.

ATCC Staff



## Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

## ATCC Warranty

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. While other, unspecified media



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may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this strain. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

## Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

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Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at [www.atcc.org](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

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