



# pJIR418 [JIR1961]

77387™

## 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 - AvalI - 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; SspI - 3235; NheI - 3549; NaeI - 3653; HpaI - 4206; EcoRV - 4723; SmaI -4984; Aval - 5059; Scal - 5850.

**Clone type:** Vector

**Shipping information:** *Escherichia coli* DH5alpha containing the plasmid

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -80°C or colder

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## 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.

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## BSL 1

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## Vector Information

**Construct size (kb):** 7.36

**Vector name:** pJIR418 (plasmid)

**Type of vector:** plasmid

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

**Insert detection:** lacZ'

**Markers:** cmlR; eryR

**Promoters:** lac

**Replicon:** pJIR229 ermBP; pJIR62 catP

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## Growth Conditions

**Temperature:** 37°C

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## 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

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: pJIR418 [JIR1961] (ATCC 77387)

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## References

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

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## Contact Information

ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: [tech@atcc.org](mailto:tech@atcc.org) or contact your local distributor

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