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 ScaI 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 - AvaII - 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; AvaI - 5059; ScaI - 5850.
Clone type: Vector
Shipping information: *Escherichia coli* DH5alpha containing the plasmid

Storage Conditions

Product format: Frozen
Storage conditions: -80°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): 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

Growth Conditions

Temperature: 37°C

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

Material Citation

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

References

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

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