



# *Escherichia coli* 1046 (pCRE1)

77368™

## Description

This *E. coli* contains the pCRE1 plasmid and expresses the Cre recombinase from a lacZ promoter. Insert-containing lambdaMGU2 (77367) cannot grow productively in this RecA- strain, so excised phagemid are recovered as ampR survivors of phage infection.

**Clone type:** Clone

**Host:** *Escherichia coli* 1046

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## Storage Conditions

**Product format:** Freeze-dried

**Storage conditions:** 2°C to 8°C

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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

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.

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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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## Insert Information

**Insert size (kb):** 1.6

**Type of DNA:** genomic

**Genome:** bacteriophage P1

**Target gene:** recombinase, site-specific

**Gene name:** recombinase, site-specific

**Gene product:** recombinase, site-specific [cre]

**Gene symbol:** cre

**Contains complete coding sequence:** Unknown

**Insert end:** PvuII

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## Vector Information

**Construct size (kb):** 5.960

**Intact vector size:** 4.363

**Vector name:** pBR322

**Type of vector:** plasmid

**Construction:** pBR313

**Vector information:**

Cross references: DNA Seq. Acc.: J01749

**Cloning sites:** EcoRI; ClaI; HindIII; EcoRV; BamHI; SphI; SalI; XmaIII; NruI; BspMI; BsmI; StyI; Aval; Ball; BspMII; PvuII; Tth111I; NdeI; AflIII; PpaI; PstI; PvuI; Scal; SspI; AatII

**Markers:** ampR; tetR

**Replicon:** pMB1

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## **Growth Conditions**

### **Medium:**

ATCC Medium 1273: LB medium (ATCC medium 1065) with 20 mcg/ml tetracycline

**Temperature:** 37°C

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## **Handling Procedures**

1. Open vial according to instructions.
  2. Aseptically add 0.3 to 0.4 mL of liquid medium to the freeze-dried pellet and mix well. Transfer 100 µL to a test tube containing 5 mL of the recommended media. A loopful of culture can also be streaked on an agar plate of the same. Incubate cultures at 37°C.
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## **Notes**

Restriction digests of the clone give the following sizes (kb): EcoRI--3.9, 2.05; XmnI--3.1, 2.4, 0.45; HindIII--5.2, 0.75; BamHI--4.4, 1.55; EcoRI/PstI--3.5, 1.4, 0.7, 0.35.

- ATCC staff

Expresses the Cre recombinase from a lacZ promoter. Insert-containing lambdaMGU2 (ATCC 77367) cannot grow productively in this RecA- strain, so excised phagemid are recovered as ampR survivors of phage infection.

- Gene 120: 135-141, 1992

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## **Material Citation**

If use of this material results in a scientific publication, please cite the material in the following manner: *Escherichia coli* 1046 (pCRE1) (ATCC 77368)

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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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## Revision

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## ***Escherichia coli* 1046 (pCRE1)**

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Product Sheet

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