pCM56

53202™

Description

This is a clone of the RNA polymerase gene from bacteriophage T3. It was cloned from a 5.9 kb MboI fragment of bacteriophage T3. The fragment was digested with NstI and AflII and treated with Bal31 to remove promoter sequences. Expression in this construct is regulated by the lacUV5 promoter and inducible by IPTG. The insert contains the following restriction sites (approximate kb from the 5' end): HincII – 0.3, 1.0, 1.7; NdeI – 1.9; StuI – 0.4.

Organism: *Escherichia coli* bacteriophage T3

Clone type: Clone

Host: *Escherichia coli* BL21

Patent depository: This material was deposited with the ATCC Patent Depository to fulfill U.S. or international patent requirements. This material may not have been produced or characterized by ATCC. As an International Depository Authority (IDA) for patent deposits, ATCC is required to complete viability testing only at time of initial deposit of patent material. Patent deposits are made available on behalf of the Depositor when the pertinent U.S. or international patent is issued, but material may not be used to infringe the patent claims.

Patent number:

5,037,745

Technical information: ATCC Product Experience does not have technical information on patent deposits that are not produced or characterized by ATCC. Additional information can be found in the corresponding patent available from the patent holder or with the U.S. and/or international patent office.

Shipping information: *Escherichia coli* containing the plasmid in glycerol stock

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.

Insert Information

Insert size (kb): 2.712
Type of DNA: genomic
Insert information:
Cross references: DNA Seq. Acc.: X02981
Nucleotides 1-2712 of the insert correspond to nucleotides 96-2807 of X02981.
Genome: bacteriophage T3
Target gene: RNA polymerase
Gene name: RNA polymerase
Gene product: RNA polymerase [gene 1]

Gene symbol: gene 1
Contains complete coding sequence: Yes
Insert end: Modification: BamHI linker

Vector Information

Construct size (kb): 8.48
Intact vector size: 5.758
Vector name: pCM53
Type of vector: plasmid
Construction: pAR1234 (deletion of the 346 bp HindIII/BamHI fragment following the lacUV5 promoter)
Host range: *Escherichia coli*
Vector end: BamHI
Cloning sites: BamHI
Markers: ampR
Promoters: lacUV5
Replicon: pMB1, ← 2128-2128
Repressor gene: lacI
Restriction sites: BamHI

Growth Conditions

Medium:
ATCC Medium 1227: LB Medium (ATCC medium 1065) with 50 mcg/ml ampicillin
Temperature: 37°C

Handling Procedures

Thaw contents of the vial in a 37°C water bath with gentle agitation. 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. Incubate cultures at 37°C. Isolate DNA using standard plasmid preparation procedures.

Notes

Restriction digests of the clone give the following sizes (kb): BamHI--6.55, 2.7; HindIII--9.4; NdeI--6.55, 2.7.
- ATCC staff

Insert contains the following restriction sites (approximate kb from the 5' end): HincII--0.3, 1.0, 1.7; NdeI--1.9; StuI--0.4.
- GenBank/EMBL/DDBJ

Cloned from a 5.9 kb MboI fragment of bacteriophage T3. The fragment was digested with MstI and AflII and treated with Bal31 to remove promoter sequences. Expression in this construct is regulated by the lacUV5 promoter and inducible by IPTG.
- Gene 41: 193-200, 1986

.patent

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: pCM56 (ATCC 53202)

References

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

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