pXC47

87001™

Description

One of 12 expression vectors (ATCC# 86990-87001) designed to maximize expression from the lambda PL promoter and support cloning of PCR products. The vectors differ in cloning sites and in translational enhancer and initiation sequences.This vector contains a 0.7 kb bovine cDNA that can be excised using the 5? and 3? cloning sites and be replaced by a gene of interest. The bovine insert may be used a a positive control for expression. An insert is expressed as a Met-His fusion protein. Sequences cloned into the NsiI/NdeI site are expressed as a Met-His fusion protein, while sequences cloned into the SwaI site can be expressed as an unfused protein (ATG must be in the cloned insert).

Organism: *Bos taurus*, cow
Clone type: Vector
Shipping information: *Escherichia coli* containing the plasmid

Storage Conditions

Product format: Freeze-dried
Storage conditions: 2°C to 8°C

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): 0.69999999999999996
Type of DNA: cDNA
Insert source: brain
Insert tissue: brain
Gene product: [14-3-3]

Vector Information

Construct size (kb): 5.781000137329102
Vector name: pXC47 (plasmid)
Type of vector: plasmid
Construction: pXC24, oligo cassette
Vector information: restriction site: 3' sites HindIII...BamHI
restriction site: 5' SwaI...NsiI/NdeI sites
spacer sequence: ATTTAA
Coding sequence: 14-3-3
Enhancer: T7 gene 10
Initiation codon: ATG

Markers: ampR
Promoters: Expression: lambda PL
Replicon: ROP copy number control; pMB1
Restriction sites: HindIII; EcoRV; NheI; BamHI; SwaI; NsiI/NdeI
Ribosome-binding site: Synthetic Shine-Dalgarno
Terminator: partially deleted lambda terminator
Transcription terminator: partially deleted lambda terminator
Translational enhancer: T7 gene 10

Growth Conditions

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

Notes

Restriction digests of the clone gave the following sizes (in kb): BamHI 5.8 ; EcoRI 5.8, HindIII 5.8. ATCC staff

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: pXC47 (ATCC 87001)

References

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

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