



# pBAD28

87400™

## Description

One of several tightly controlled expression vectors (ATCC 87393-87402) regulated by the arabinose operon. Vectors differ in replicon, antibiotic resistance marker, multiple cloning sites and need for translation initiation sequences. This vector, pBAD28, has the p15A replicon and ampicillin and chloramphenicol resistance. Cultures should be grown in minimal media for more reproducible induction of expression. Expression is induced in glycerol-containing media by the addition of arabinose. Expression is repressed by the addition of glucose or other catabolites. Plasmid copy number is low due to the p15A replicon. This vector can be used when reduced gene expression is desirable. The plasmid is compatible with pBR-derived plasmids and may be used for coexpression of cloned inserts. The following primers can be used for sequencing of cloned inserts: 5' primer (27 ? 8 bp upstream of the NheI site) 5'CTGTTTCTCCATACCCGTT-3'; and one of two 3' primers: 3' primer 1 (2-19 bp downstream of the HindIII site) 5'CTCATCCGCCAAAACAG-3'; 3' primer 2 (17-33 bp downstream of the HindIII site) 5'GGCTGAAAATCTTCTCT-3'

**Clone type:** Vector

**Shipping information:** *Escherichia coli* DH5α containing the plasmid in glycerol stock

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## Storage Conditions

**Product format:** Frozen

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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.

## 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

**Target gene:** arabinose regulator

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## Vector Information

**Construction:** pBAD18, pACYC184

**Vector information:**

other: CAP site

**Markers:** araC; cmlR; ampR

**MCS:** NheI...HindIII

**Operator:** I2 + I1; O1; O2

**Polylinker sites:** NheI; EcoRI; SacI; KpnI; SmaI; BamHI; XbaI; Sall; Accl; PstI; SphI; HindIII

**Regulator:** araC

**Replicon:** M13; p15A

**Terminator:** rrnB T1 + T2

**Transcription terminator:** rrnB T1; rrnB T2

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## Growth Conditions

**Medium:**

ATCC Medium 1949: LB medium (ATCC medium 1065) with 50 mcg/ml chloramphenicol and 100 mcg/ml ampicillin

**Temperature:** 37°C

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## Notes

Restriction digests of the clone gave the following sizes (in kb): BamHI ? 6.1; Aval ? 3.1, 1.9, 1.3; PstI ? 5.0, 1.2.

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: pBAD28 (ATCC 87400)

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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

This information on this document was last updated on 2021-05-19

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