



# PES5(2) Plasmid in *Escherichia coli*

53098™

## Description

**Clone type:** Clone

**Host:** *Escherichia coli* LE392

**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:**

4,769,319

**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.

---

## Storage Conditions

**Product format:** Freeze-dried

---

## 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](http://www.atcc.org).

---

## Insert Information

**Insert size (kb):** 0.29999999999999999

**Type of DNA:** genomic

**Insert source:** liver

**Insert tissue:** Liver

**Genome:** bovine

**Target gene:** male-specific DNA

**Gene name:** male-specific DNA

**Gene product:** male-specific DNA

**Contains complete coding sequence:** Unknown

**Insert end:** RsaI or EcoRI

---

## Vector Information

**Construct size (kb):** 4.659999847412109

**Intact vector size:** 4.363

**Vector name:** pBR322

## PES5(2) Plasmid in *Escherichia coli*

53098

Product Sheet

**Type of vector:** plasmid

**Construction:** pBR313

**Host range:** *Escherichia coli*

**Vector end:** PstI

**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

---

### Growth Conditions

**Medium:**

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

**Temperature:** 37°C

---

### Notes

Restriction digests of the clone give the following sizes (kb): EcoRI--4.6; RsaI--2.2, 2.0, 0.6; PstI--4.4, < 0.5; BamHI--4.6.

- ATCC staff

Isolated from a library constructed by digesting genomic male DNA with RsaI followed by EcoRI. The 2.5 to 6 kb size fraction was dCMP-tailed and cloned into dGMP-tailed pBR322. Insert contains bovine male-specific DNA for use in sexing embryos using as few as 6 cells (<100 picograms DNA) with nearly 100% accuracy. To be used in conjunction with pES8 (ATCC 53099). pES5(2) (ATCC 53098) does not hybridize to pES8 (ATCC 53099) under stringent conditions. Neither probe hybridizes with female bovine total DNA (Hereford) nor with either sex of swine or sheep.

- U.S. Pat. 4,769,319 dated Sept. 6, 1988

.patent

---

## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: PES5(2) Plasmid in *Escherichia coli* (ATCC 53098)

---

## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

---

## Warranty

The product is provided 'AS IS' and the viability of ATCC® products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product. While other unspecified media and reagents may also produce satisfactory results, a change in the ATCC and/or depositor-recommended protocols may affect the recovery, growth, and/or function of the product. If an alternative medium formulation or reagent is used, the ATCC warranty for viability is no longer valid. Except as expressly set forth herein, no other warranties of any kind are provided, express or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose, manufacture according to cGMP standards, typicality, safety, accuracy, and/or noninfringement.

---

## Disclaimers

53098

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. Any proposed commercial use is prohibited without a [license from ATCC](#).

While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate or complete and the customer bears the sole responsibility of confirming the accuracy and completeness of any such information.

This product is sent on the condition that the customer is responsible for and assumes all risk and responsibility in connection with the receipt, handling, storage, disposal, and use of the ATCC product including without limitation taking all appropriate safety and handling precautions to minimize health or environmental risk. As a condition of receiving the material, the customer agrees that any activity undertaken with the ATCC product and any progeny or modifications will be conducted in compliance with all applicable laws, regulations, and guidelines. This product is provided 'AS IS' with no representations or warranties whatsoever except as expressly set forth herein and in no event shall ATCC, its parents, subsidiaries, directors, officers, agents, employees, assigns, successors, and affiliates be liable for indirect, special, incidental, or consequential damages of any kind in connection with or arising out of the customer's use of the product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

Please see the material transfer agreement (MTA) for further details regarding the use of this product. The MTA is available at [www.atcc.org](http://www.atcc.org).

This material is cited in a US and/or international patent and may not be used to infringe the claims. Depending on the wishes of the Depositor, ATCC may be required to inform the Depositor of the party to which the material was furnished.

---

## Copyright and Trademark Information

© ATCC 2023. All rights reserved.

## **PES5(2) Plasmid in *Escherichia coli***

53098

Product Sheet

ATCC is a registered trademark of the American Type Culture Collection.

---

### **Revision**

This information on this document was last updated on 2024-10-24

---

### **Contact Information**

ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: [tech@atcc.org](mailto:tech@atcc.org) or contact your local distributor

---