




Product Sheet

## pRS423 (ATCC® 77104™)

### Please read this FIRST



Storage Temp.  
**Store unopened  
freeze dried vial  
at 4°C.**

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Biosafety Level  
**1**

### Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

### Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: pRS423 (ATCC® 77104™)

### Shipping Information

Freeze dried phagemid in *E. coli*

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

### Description

A YE-type (episomal) *E. coli*/*S. cerevisiae* shuttle vector permitting RNA synthesis in vitro, visual detection of recombinants, production of single stranded DNA and containing primer sites useful for sequencing

**Designation:** pRS423

### Propagation

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  $\mu$ L to a test tube containing 5 mL LB+ ampicillin (50-100  $\mu$ g/mL). A loopful of culture can also be streaked on an agar plate of the same. Incubate cultures at 37°C. 3. Isolate DNA using standard plasmid preparation procedures.

### Growth Conditions

**Temperature:** 37.0°C

### Medium

ATCC® Medium 1227: LB Medium (ATCC medium 1065) with 50 mcg/ml ampicillin

### Vector Information

Size (kb): 5.797

Vector: pRS423 (phagemid)

Promoters: Promoter T7 (phi10)

Construction: pJS92, pRS303, pBluescript II SK+

Marker(s): ampR, HIS3

Construct size (kb): 5.797

Features: insert detection: lacZ'

marker(s): HIS3

marker(s): ampR

promoter: T3

promoter: T7 (phi10)

promoter: lac

replicon: 2 micron

replicon: f1

replicon: pMB1

MCS: KpnI...SacI

### References

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

### Notes

The beta galactosidase alpha peptide permits blue-white detection of recombinants. The vector also contains the REP3 and FRT sequences necessary for high copy propagation in yeast. In *S. cerevisiae*, the copy number is about 20 per haploid cell. In non-selective growth, plasmids are lost through mitotic segregation at rates in the range of 4.3 +/- 1.3% of progeny doubling.

- Gene (Amst.) 110 : 119-122,  
1992 Restriction digests of the clone gave the following sizes (in kb): BamHI 5.8 ; EcoRI 5.8 ; PvuII 3.7,  
2.1. ATCC Staff

### Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

### ATCC Warranty


The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC



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recommended media may affect recovery, growth and/or function of this strain. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

### Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans.

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This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.

Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at [www.atcc.org](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

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