



# pRS412

## 87478™

Product Sheet

### Description

**Clone type:** Vector

**Host:** *Escherichia coli* HB101 (ATCC 33694)

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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.

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### 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:** phosphoribosylaminoimidazole succinocarboxamide synthetase

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## Vector Information

**Construct size (kb):** 6.042

**Intact vector size:** 6.042

**Vector name:** pRS412 (phagemid)

**Type of vector:** phagemid

**Construction:** pRS402, pRS411

**Host range:** *Saccharomyces cerevisiae*; *Escherichia coli*

**Cloning sites:** SacI; SacII; EagI; NotI; SpeI; BamHI; SmaI; PstI; EcoRI; ClaI; Sall; XhoI; ApaI; KpnI

**Insert detection:** lacZ', <-, 2952-3311

**Markers:** ampR; ADE2

**MCS:** KpnI...SacI, ->, 3148-3250

**Polylinker sites:** SacI; BstXI; SacII; EagI; NotI; XbaI; SpeI; BamHI; SmaI; PstI; EcoRI; EcoRV; HindIII; ClaI; Sall; XhoI; ApaI; KpnI

**Promoters:** *In vitro* transcription T7; lac

**Replicon:** f1, ←, 2495-2951; pMB1, 3710-3710; ARS4, 5587-5988

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## Growth Conditions

**Medium:**

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

**Temperature:** 37°C

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## Notes

Restriction digests of the clone give the following sizes (kb): BamHI--6.0;  
BglII--2.2, 3.8; EcoRI--6.0.  
- ATCC staff

ade2 phenotype produces red colonies when grown on adenine containing media.  
- Yeast 14: 115-132, 1998

This vector is useful for gene knockout experiments in hosts with a  
non-revertable ade2 auxotrophic marker gene mutation.  
- Yeast 14: 115-132, 1998

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the  
following manner: pRS412 (ATCC 87478)

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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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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  
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## Revision

This information on this document was last updated on 2024-10-25

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