

87561<sup>TM</sup>

## Description

This is a set of 15 marker swap vectors, each containing a gene disruption conversion cassette for conversion between standard markers used for transformation selection in *Saccharomyces cerevisiae*. The vectors are useful in changing markers for gene disruptions or for changing markers on plasmids.

**Shipping information:** *Escherichia coli* HB101 stocks containing the plasmid arrayed on a microtiter plate

## **Storage Conditions**

**Product format:** Frozen

Storage conditions: -80°C or colder

#### 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<sub>1</sub>

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.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

### Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

## Handling Procedures

Transfer a loopful to a test tube containing 5 mL LB+ antibiotic (either 50  $\mu$ g/mL of ampicillin 10  $\mu$ g/mL chloramphenicol or 25  $\mu$ g/mL chloramphenicol and 50  $\mu$ g/mL kanamycin check specific markers). A loopful of culture can also be streaked on an LB + amp or chl agar plate. Incubate cultures at 37°C. Isolate DNA using standard plasmid preparation procedures.

#### Notes

To convert the host phenotype from the existing yeast auxotrophic marker to a new marker (eg. HIS3 → LEU2), transform with the restriction enzyme digested vector (eg.

Apal+Pstl digested pHL3) and select for the appropriate phenotype (for pHL3, Leu+).

Some combinations of marker swap plasmids and target locus may result in relatively high reversion rates. In most, but not all cases, the frequencies of successful convertants are greater than 30%. When swapping markers on an episomal plasmid, appropriate phenotype may result from loss of the plasmid unless a second selectable or scorable marker is used to ensure plasmid maintenance.

Refer to reference for more information.

- Yeast 13: 647-653, 1997

#### Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *S. cerevisiae/E. coli* marker swap vectors (ATCC 87561)

#### References

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

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#### Revision

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