Basic Yeast Synthetic Biology Tool Kit

SB-2000™

Description

A basic tool kit for the construction of gene expression systems and gene circuits in the yeast *Saccharomyces cerevisiae*.

This tool kit contains (1) four destination vectors: pDEST-12y (SB-1000®), pDEST-23y (SB-1001®), pDEST-34y (SB-1002®), and pDEST-45y (SB-1003®); (2) three yeast vectors: pCarrier 3 (416) (SB-1004®), pCarrier 7 (426) (SB-1005®), and pCarrier 8 (integ) (SB-1024®); (3) one yeast selection maker: pENTR_L1L2_KanMX (SB-1006®); (4) four yeast constitutive promoters: pENTR_L4R1_pHOG1 (SB-1008®), pENTR_L4R1_pHOT1 (SB-1035®), pENTR_L4R1_pYPD1 (SB-1041®), and pENTR_L4R1_pSKN7 (SB-1105®), (5) one yeast inducible promoter: pENTR_L4R1_pGAL1 (SB-1046®); and (6) two empty Entry vectors: pENTR_L1L2_DONR1 (SB-1013®) and pENTR_L4R1_DONR2 (SB-1014®). Detail information of these plasmids can be found in these products' information and in the ATCC® Synthetic Biology Solutions User Guide.

Components:

Destination vectors:

pDEST-12y (ATCC SB-1000)
pDEST-23y (ATCC SB-1001)
pDEST-34y (ATCC SB-1002)
pDEST-45y (ATCC SB-1003)

Yeast vectors:

pCarrier 3 (416) (ATCC SB-1004)
pCarrier 7 (426) (ATCC SB-1005)
pCarrier 8 (integ) (ATCC SB-1024)

Yeast selection maker:

pENTR_L1L2_KanMX (ATCC SB-1006)

Yeast constitutive promoters:
pENTR_L4R1_pHOG1 (ATCC SB-1008)
pENTR_L4R1_pHOT1 (ATCC SB-1035)
pENTR_L4R1_pYPD1 (ATCC SB-1041)
pENTR_L4R1_pSKN7 (ATCC SB-1105)

Yeast inducible promoter:
pENTR_L4R1_pGAL1 (ATCC SB-1046)

Entry vectors:
pENTR_L1L2_DONR1 (ATCC SB-1013)
pENTR_L4R1_DONR2 (ATCC SB-1014)
Volume: 2 µg to 3 µg

Storage Conditions

Storage conditions: 2°C to 8°C

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.

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

Before opening the vial, centrifuge at 6,000 x g for 30 seconds. Add 30 µL of Molecular Grade Water and incubate the vial at 4°C overnight to dissolve the DNA. Each vial contains 2-3 µg plasmid DNA (measured by PicoGreen® dsDNA quantitation assay).

Notes

Before opening the vial, centrifuge at 6,000 x g for 30 seconds. Add 20 µL of sterilized water to dissolve the DNA. Each vial contains 2-3 mg plasmid DNA.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Basic Yeast Synthetic Biology Tool Kit (ATCC SB-2000)

References

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

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