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BIO BASIC INC.

Ultra-Fast 96-Well Plate Plasmid DNA Mini-Preps Kit

BS92028 and BS92029

Version 6.2
ISO9001 Certified

20 Konrad Cres, Markham Ontario L3R 8T4 Canada
Tel: (905) 474 4493, (800) 313 7224 Fax: (905) 474 5794
Email: order@biobasic.com Web: www.biobasic.com

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Product information for BS92028/BS92029

Kit Contents

Components	BS92028, 2×Plates	BS92029, 5×Plates
Lysis Buffer UF	150 ml	2X150 ml
Buffer DW1 [(a)]	100 ml	2X120 ml
Universal Wash Solution [(b)]	48 ml	2X48 ml
Elution Buffer	20 ml	50 ml
EZ-10 96 Well Binding Plate	2	5
Deep Well Collection Plate	4	10
96 Well Storage Plate	2	5
Sealing film	8	20
Protocol	1	1

a) Before use, add 25ml or 2X30ml of isopropanol to Buffer DW1 in BS92028 and BS92029 respectively. For other volumes of Buffer DW1, simply add enough isopropanol to make a **1:4** ratio (volume of added isopropanol: volume of

Buffer DW1 = 1:4).

b) Before use, add 192ml or 2X192ml of 100% of ethanol to Universal Wash Solution in BS92028 and BS92029 respectively. For other volumes of wash solution, simply add enough ethanol to make a **4:1** ratio (volume of added ethanol: volume of Wash Solution = 4:1).

Storage

Transport at room temperature.
Lysis Buffer UF should be stored at 4 ºC.

Introduction

This kit is designed for one step plasmid DNA purification from bacterial culture in a 96-well high throughput format. Using one buffer solution and replacing traditional three-buffer system, the kit releases plasmid DNA rapidly from bacterial culture. Although the yield of the recovered plasmid DNA is slightly lower than that from regular 96-Well Plate Kits, it is simpler and faster. Bacterial cultures are lysed and the lysates are directly loaded onto membrane of each column in a 96-Well plate. Plasmid DNA is selectively bound onto the 96-well plate and other impurities are washed away. Pure plasmid DNA is eluted in Elution buffer or water, and can be readily used for many downstream applications. This kit is used for preparation of up to 6-8ug of pure plasmid DNA.

Features

1. Fast & Simple. Using, one step lysis, spin column and 96-well high throughput format, the entire procedure takes about 20 minutes.
2. High Purity of DNA. Ration of $OD_{260/280}$ of plasmid DNA purified by this kit is ≥ 1.8. Purified plasmid DNA can be used for many downstream applications such as DNA sequencing, Cloning, PCR, transformation and restriction enzyme digestions.
3. No phenol/chloroform extraction and ethanol precipitation are required.

Procedures

1. Fill each well of a Deep Well Collection Plate with 1.0 ml of growth medium containing the appropriate selective antibiotic. Inoculate each well from a single bacterial colony. Incubate the cultures for overnight or 20-24 hours at 37°C with shaking at 300 rpm.

Note: The wells in the block may be protected against spill-over by covering the block with a plastic lid or adhesive tape. If non-porous tape is used, pierce 2–3 holes in the tape with a needle above each well for aeration. For optimal DNA yield, use 1.5 - 5 ml overnight culture to start.

2. Harvest the bacterial cells in the Deep Well Collection Plate by centrifugation for 5 minutes at 5,700 x g in a centrifuge with a rotor for microtiter plates. The Deep Well Collection Plate should be covered with Sealing Film during centrifugation. Remove medium by inverting the Deep Well Collection Plate.

Note: To remove the media, peel off the Sealing Film and quickly invert the Deep Well Collection Plate over a waste container. Tap the inverted Deep Well Collection Plate firmly on a paper towel to remove any residues.

3. Resuspend each well of bacterial cells in 0.75 ml of Lysis Buffer UF (Lysis Buffer UF should be mixed by shaking prior to use). Vortex thoroughly for 30 seconds until lysate become clear.
4. Assemble EZ-10 96 Well Binding Plate on top of a new Deep Well Collection Plate. Transfer the supernatant from step 3 onto the center part of each well of EZ-10 96 Well Binding Plate. Keep the column at room temperature for 2 minutes. Centrifuge at 5,700 *x g* for 2 minutes. Discard the flow-through in the Collection Plate.
5. Add 500 µl Buffer DW1 to each well of EZ-10 96 Well Binding Plate and centrifuge at 5,700 *x g* for 2 minutes. Discard the flow-through in the Deep Well Collection Plate.
6. Add 500 µl Universal Wash Solution to the EZ-10 96 Well Binding Plate and centrifuge at 5,700 *x g* for 2 minutes. Discard the flow-through in the Deep Well Collection Plate.
7. Repeat Step 6 once.
8. Centrifuge at 5,700 *x g* for an additional 2 minutes to remove any residual Wash Solution.

   Note: In order to increase the yield, keep the 96-Well Plate at room temperature for 10 minutes or at 50 ºC for 5 minutes to allow the residual ethanol to evaporate completely.

9. To elute, place a 96 Well Storage Plate on top of a Deep Well Collection Plate, and then place the EZ-10 96 Well Binding Plate on the top of a 96 Well Storage Plate. Add 30-50 µl of Elution Buffer into the center part of the membrane of each well and incubate at 37-50 ºC for 2 minutes.

Note: 96 Well Storage Plate is very fragile and needs to be placed on top of a Deep Well Collection Plate for support during centrifugation.

10. Centrifuge at 5,700 *x g* for 2 minutes. Store purified DNA at -20 ºC.

Other Kits Available

EZ-10 Spin Column Plasmid DNA Mini-Preps Kit

BS413 (50 Preps)
BS414 (100 Preps)
BS614 (250 Preps)

EZ-10 Spin Column PCR Products Purification Kit

BS363 (50 Preps)
BS364 (100 Preps)
BS664 (250 Preps)

EZ-10 Spin Column DNA Gel Extraction Kit

BS353 (50 Preps)
BS354 (100 Preps)
BS654 (250 Preps

PRODUCTS ARE INTENDED FOR BASIC SCIENTIFIC RESEARCH ONLY!
NOT INTENDED FOR HUMAN OR ANIMAL USE!

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