Tribioscience

96wells Mini Plasmid DNA Extraction (Catalog# TBS6012)

For purification of up to 30 µg plasmid DNA

DESCRIPTION

96 Wells Mini Plasmid DNA Extraction Prep provides a simple, fast and cost-effective method to purify plasmid DNA for gene clone analysis. It is based on binding of DNA to silica-based membranes in chaotropic salts. This Kit perfectly make the plasmid DNA binding step and the lysate clearance step into one. This modification significantly increases the purity and yields of plasmid, and save 50% of the processing time in comparison to current similar products in the market.

This kit can be ideally used to isolate and purify the plasmid less than 10kb. The efficiency may be reduced with the size increasing.

APPLICATIONS

- Isolate and purify plasmid DNA from 1~ 3 ml of E. coli culture media.
- DNA can be directly used for PCR, cloning, sequencing, cell transfection, enzymatic analysis without further manipulation.

KIT CONTENTS

Part	Size
DNA Binding plate (96 wells)	2
Clear Filter plate (96 wells)	2
Storage plate (96 wells)	1
DNA Collection plate (96 wells)	2
Buffer 1 (PB1)	50 mL
Buffer 2 (PB2)	50 mL
Buffer 3 (PB3)	60 mL
Buffer 4 (PB4)	100 mL
Buffer 5 (PB5)	100 mL
Buffer 6 (PB6)	15 mL
RNase A (20 mg/ml)	0.3 mL

STORAGE CONDITIONS

The 96-wells Mini Plasmid Extraction Prep is shipped at room temperature. The buffer 1 with RNase A is suggested at 4°C. All other components are stable at room temperature. Shelf life is12 months after receipt.

KEY FEATURES

High purity and yields: The kit utilizes glass microfiber membrane DNA binding plate and Clear Filter plates to increase the purity and yields of plasmid.

Rapid: Clear Filter plate is assembled with Binding plate to combine the lysate clearance and plasmid DNA binding into one step. The 50% time will be saved comparing to the similar products in the market.

PROTOCOL

1. Pellet the 96 deep well culture plate containing the cultured bacterial culture by centrifuging for 5 min at 7,000 x g. Discard the supernatant, and blot the deep well culture plate upside down on an absorbent pad.
2. Resuspend pelleted bacterial cells completely in 170 µL of Buffer 1 (Note: Add RNase A solution into Buffer 1 before the first use, and store it at 4°C).
3. Add 170 µL of Buffer 2 and gently mix by inverting pipetting up and down 4~5 times or seal the plate with parafilm, then invert the plate for 5-10 times to lyse the cells until the cell suspension becomes clear and viscous, but DO NOT OVER 5 min (Do NOT VORTEX, vortexing will shear genomic DNA).
4. Add 250 µL of Buffer 3 to neutralize the lysate, and immediately mix by inverting the plate 4~5 times (DO NOT VORTEX).
5. Centrifuge the deep well culture plate at 7,000 g for 5 minutes, meanwhile assembly clear filter plate (up layer) onto DNA bind plate (middle layer), and storage plate (bottom layer).
6. Transfer all of the lysate to clear filter plate. Vaccuum or Spin 2-3min. Remove the upper Clear filter plate, Discard the pass-through fraction from the storage plate. Re-insert the bind plate to the same storage plate.
7. Wash the DNA bind plate by adding 350 µL of Buffer 4, and vaccum or spin for 2-3 min. Discard the pass-through fraction from the collection plate. Re-insert the binding plate to the same collection storage plate.
8. Wash the binding plate by adding 350 µL of Buffer 5, and vaccum or spin for 2-3 min. Remove the binding plate, discard the pass-through, and re-insert the binding plate to the same collection storage plate.
9. Spin for an additional 1 min to remove residual wash buffer. Place the binding plate to a new DNA collection plate.
10. Elute DNA by adding 50 µL of Buffer 6 or deionized water, let stand for 1 min, and spin for 1 min.

RELATED PRODUCTS

PCR DNA Rapid prep Mini kit (Catalog# TBS6012)
Fast DNA Extraction kit (Catalog# TBS6008)
2x PCR Hot Start Master (Catalog# TBS4002)
2x Genotyping PCR kit (Catalog# TBS4003)
2x Regular PCR Kit (Catalog#TBS4004)

This product is for *in vitro* research use only, but not for use in humans or animals in therapeutic or diagnostic procedures.