

Catalog	Kit Size
TBS6011-50	50 Samples
TBS6011-200	200 Samples

## DESCRIPTION

Tribo™ Plasmid DNA Rapidprep Mini Kit provides a fast, simple, and cost-effective plasmid DNA preparation method for routine molecular biology laboratory applications. This Rapidprep Mini Kit uses a glass microfiber membrane and clear filter to combine the lysate clearance and the plasmid DNA binding into one step. This combination significantly increases the purity and yields of plasmid and shortens 50% of the processing time in comparison with similar products on the market. The procedure can be finished in 10 minutes.

The ideal use of this kit would be to isolate and purify plasmid with less than 10kb. The purification yield is up to 30 µg plasmid DNA. The efficiency may be reduced with the increased size.

## APPLICATIONS

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

## KIT CONTENTS

Part	6011-50	6011-200
Mini Column w/ collecting Tube	50	200
Clear Filter Column	50	200
Buffer 1 (B1)	20mL	60mL
Buffer 2 (B2)	20mL	60mL
Buffer 3 (B3)	25mL	90mL
Buffer 4 (B4)	19mL	69mL
Buffer 5 (B5)	12mL	50mL
Buffer 6 (B6)	15mL	30mL
RNase A ( 20 mg/ml)	0.1mL	0.3mL

## STORAGE CONDITIONS

Plasmid DNA Rapidprep Mini Kit is shipped at room temperature. Buffer 1 with RNase A should be kept at 4°C. All other components are stable at room temperature. Shelf life is 12 months after receipt.

## KEY FEATURES

**Simple:** Clearance and DNA binding in one step.

**High purity and yields:** The kit utilizes a glass microfiber membrane and a clear filter column to increase the purity and yields of plasmid.

**Rapid:** The clear filter column is assembled with the spin column to combine the lysate clearance and plasmid DNA binding into one step. The 10 minutes or 50% of the time is saved when compared with similar products on the market.

## PROTOCOL

1. Pellet 1-3 mL of bacterial culture by spin for 1min at 13000x g. Discard the supernatant.
2. Resuspend pelleted bacterial cells completely in 170µL of Buffer 1 (Note: Add RNase A solution into Buffer 1 before the first use, and store it at 4°C).
3. Add 170µL of Buffer 2 and mix by inverting the tube 4-5 times (DO NOT VORTEX). Incubate until the cell suspension becomes clear and viscous, but DO NOT incubate for more than 5min.
4. Add 250µL of Buffer 3 and immediately mix by inverting the tube 4-5 times (DO NOT VORTEX).
5. Transfer all of the lysate to the Clear Column stack by pipetting. Vacuum or Spin for 30-60 sec. Discard the upper Clear Column unit, Discard the pass-through fraction from the collection tube. Re-insert the spin column to the same collection tube.
6. Wash the spin column by adding 500µL of Buffer 4, and vacuum or spin for 30sec. (Note: For TBS6011-50: Make 30mL Buffer 4 by adding 11mL of abs. ethanol before first use. For TBS6011-200: Make 110mL Buffer 4 by adding 41mL of abs. ethanol before first use). Discard the pass-through fraction from the collection tube. Re-insert the spin column to the same collection tube.
7. Wash the spin column by adding 700µL of Buffer 5, and vacuum or spin for 30sec. (Note: TBS6011-50: Make 60mL Buffer 5 by adding 48mL of abs. ethanol before first use. For TBS6011-200: Make 250mL Buffer 5 by adding 200 mL of abs. ethanol before first use). Remove the spin column, discard the pass-through, and re-insert the spin column to the same collection tube.
8. Spin for an additional 1min to remove residual wash buffer. Place the spin column into a new 1.5mL tube (Not provided).
9. Elute DNA by adding 50µL of Buffer 6 or deionized water, let stand for 1min, and spin for 1min.

## RELATED PRODUCTS

- 96-well plate Plasmid Mini Prep DNA (Catalog# TBS6012)
- Fast DNA Extraction kit (Catalog# TBS6008)
- 2x Fast Sybr Green Probe qPCR Master mix (Catalog# TBS4001)
- 2x Fast Taqman Probe qPCR Master mix (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.**