



YTA-Plasmid DNA Extraction mini Kit

Cat No : YT9010

Size: 50 preps

<<for research use only>>

Kit Contents	50 preps
Buffer P1	15 ml
Buffer P2	15 ml
Buffer N3	20 ml
Buffer PE *	6 ml
Buffer EB	5 ml
RNase A	2 mg
Spin column & collection tube set	50 sets
Elution tube	50 Pcs

Preparation notes:

- 1) add 24 ml ethanol to Buffer PE
- 2) Add 1ml P1 buffer to RNase A, mix, return it to P1 buffer, and store at 2–8°C.
- 3) All centrifugation steps are carried out at 13,000 rpm (~17,900 x g) in a conventional table-top microcentrifuge

Specification:

Principle:	Mini silica spin column
Sample size:	1~3 ml
Size of plasmid or construct:	<15 kb
Operation time:	<20 min
Typical Yield:	20 ~ 30 µg
Binding capacity:	up to 50 µg 2~10 kb plasmid DNA
Column applicability:	Centrifugation and vacuum

Protocol (per 1.5 ml bacterial culture)

1. Pellet **1–3 ml overnight E. coli culture** at ~12,000 x g for 1 min.
2. Resuspend pellet completely in **250 µl Buffer P1**.
3. Add **250 µl Buffer P2**, gently invert 4–6 times (no vortexing!). Solution should clear.
4. Add **350 µl Buffer N3**, immediately invert 4–6 times until thoroughly mixed. White precipitate forms.
5. Centrifuge at max speed for 10 min.
6. Transfer supernatant carefully to your **plasmid spin column**.
7. Spin 1 min, discard flowthrough.
8. Wash column with **500 µl Buffer PE**, spin, discard flowthrough. Repeat once.
9. Spin empty column 1 min to remove ethanol.
10. Elute DNA with **30–50 µl Buffer EB** (or water). Let sit 1 min, then spin.