Gene to Protein Pvt. Ltd.
www.genetoprotein.com
info@genetoprotein.com
800 GENOME, 800 GENETIC

G2P Spin Clean Plasmid Prep Kit

Cat # ☐ **PUR11-50** ☐ **PUR11-50-S**

Pack size: ☐ **50 rxns** ☐ **5 rxns**

Storage: Room Temperature*; Store Buffer A and Buffer C at 4°C on arrival.

Kit Content: * Store at 4°C

S.No	Components	PUR11-50	PUR11-50-S
1	Buffer A (Resuspension Buffer)*	15mL	1.5mL
2	Buffer B (Lysis Buffer)	15mL	1.5mL
3	Buffer C (Neutralization Buffer)*	30mL	3mL
4	Buffer D (Wash Buffer)	10mL	2mL
5	Buffer E (Elution Buffer)	5mL	500 µl
6	Spin Columns and Collection Tubes	50	5

Introduction

G2P Spin Clean Plasmid Prep Kit is a used to purify plasmid DNA from bacterial cultures. This kits typically use spin column-based methods to separate plasmid DNA from other cellular components, such as proteins, lipids, and RNA. Spin column-based kits are widely used in molecular biology research and are known for their ease of use, high yield, and high purity of the resulting plasmid DNA. The spin column itself is a small, plastic column that is packed with silica-based beads that bind to and purify the plasmid DNA. G2P Spin Clean Plasmid Prep Kit includes reagents and instructions for lysing the bacteria, binding the plasmid DNA to the beads, and eluting the purified Plasmid DNA.

Highlights

Purity: No genomic DNA or RNA contamination

Quality: Mostly supercoiled plasmid with very little or no nicked/linear plasmid; High Phred score in Sanger sequencing

Simple: No phenol/chloroform extraction or alcohol precipitation required

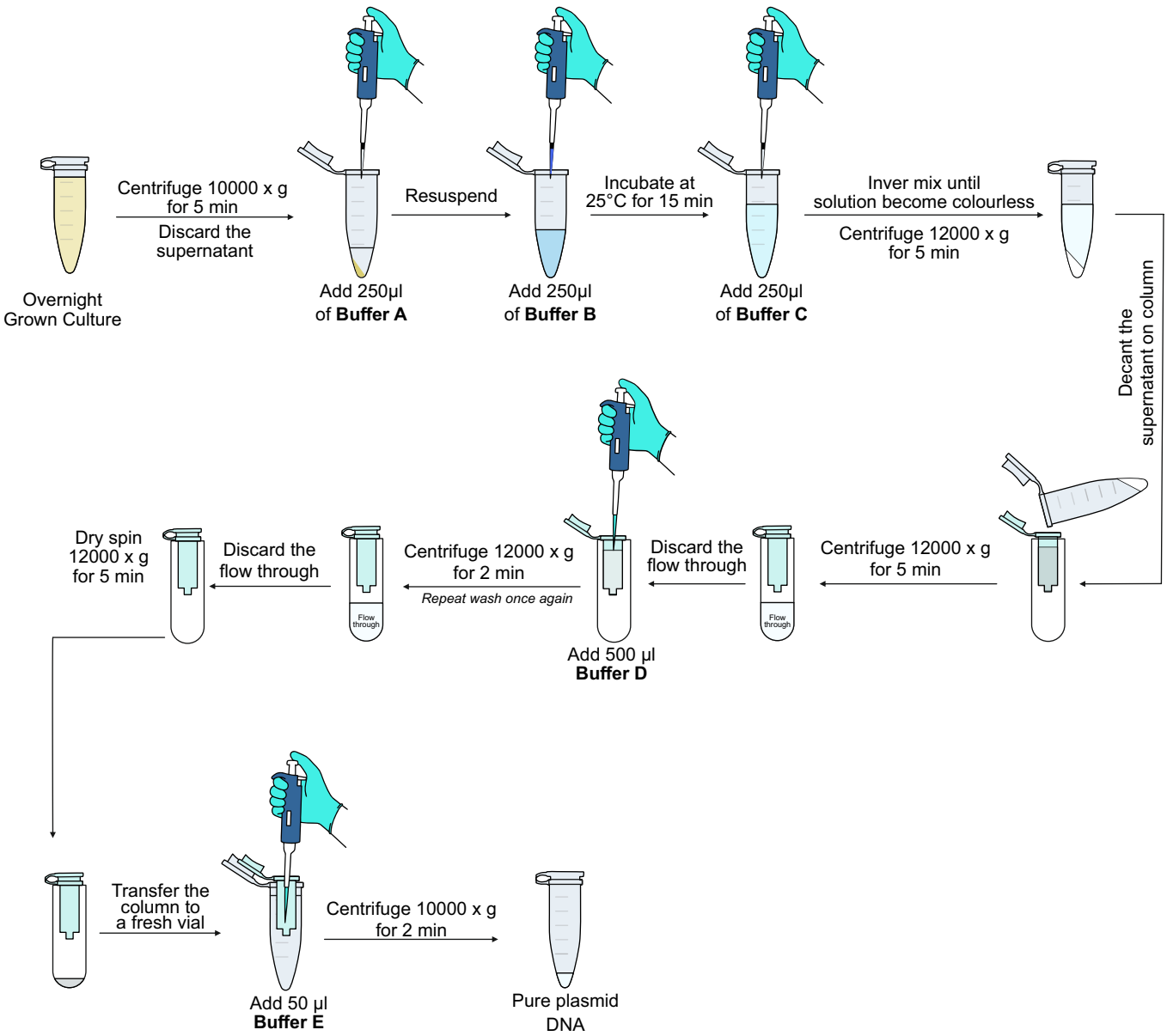
Yield: ~20 µg of plasmid DNA can be obtained from a single column depending upon copy number of plasmid and starting volume of culture taken

Protocol

Add 40ml ethanol to 10mL of buffer D before starting the protocol

1. Pellet down 1-5 ml overnight grown bacterial culture at 10,000xg for 5 min in 1.5 ml microcentrifuge (Discard the supernatant)
2. Add 250 µl of **Buffer A** Resuspend the pellets gently
3. Add 250 µl of **Buffer B** Mix gently and keep it at room temperature for 15 minutes (Do not vortex)
4. Add 500 µl of **Buffer C** and mix gently until solution become colourless
5. Spin at high speed (12,000xg) for 5 min and load the supernatant on the spin column with collection tube
6. Spin at 10,000xg for 3 min
7. Discard the flow through
8. Add 500 µl of **Buffer D** and spin for 3 min
9. Discard the flow through (repeat 8-9 once again)
10. Dry spin for 12,000xg for 5 min
11. Place the column on a fresh microfuge tube (Not included in the kit) and add ~50 µl of **Buffer E**
12. Spin at 10,000xg for 2 min high speed and collect the elution (Purified Plasmid)

Graphical Protocol



Result

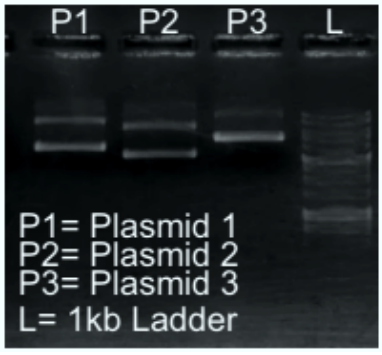


Fig: Plasmid DNA was isolated using PUR11 kit (lane P1-P3). 100ng of DNA was loaded on 0.8% agarose gel