شرکت تحقیقاتی تولیدی پویا ژن آزما
POUYA GENE AZMA Co. (PGA)

# PGA Plasmid purification kit

**Catalog No. PL240-050** **Quantity: 50 Prep**

PGA Plasmid purification kit is designed to isolate up to 30 µg of high-quality plasmid DNA from 1-5 mL bacterial cultures in 30 minutes or less. Plasmid DNA purification is simplified with Mini Column technology Purified plasmid DNA is immediately ready for a wide variety of downstream applications such as routine screening, restriction enzyme digestion, and DNA sequencing.

## Features and Benefits

Spin column format
Rapid purification
Stable and consistent result
Instant use : No need of additional materials
30 $\mu$gof binding capacity and high purity
Compatible with endA+ strains
No use of organic solvents
Ready for use in fluorescent sequencing, cloning, hybridization, electroporation and other enzymatic manipulation

## Component list

| | |
|---|---|
| column | 50 |
| Collection tube | 50 |
| Buffer R - Cell Resuspension Buffer | 10 ml |
| Buffer L - Cell Lysis Buffer | 12.5 ml |
| Buffer N - Neutralization Buffer | 17.5 |
| Buffer W - Column Wash Buffer | 25 ml |
| Buffer EB - Elution Buffer | 5 ml |
| RNase A (20 mg/ml) | 150 µl |
| Protocol Handbook | 1 |

**Storage** :RNase A at -20oC for one year; others at room temperature (15-25oC) for one yea

## Procedure

1- Add 1-5 ml (High copy number plasmid) or up to 10 ml (Low copy number plasmid) overnight cultured bacterial suspension to a microcentrifuge tube.
2- Centrifuge at 13000 rpm for 1 minute. Discard the supernatant.
3- Add 200 µl of R buffer (premixed with Rnase A) to the cell pellet and resuspend it completely by pipetting.
4- Add 250 µl of L buffer , mix immediately and thoroughly by inverting the tube 4-6 times.
5- Add 350 µl of N buffer , mix thoroughly by inverting the tube 4-6 times. When the neutralization is complete , precipitate will form. Incubate the lysate at room temprature for 2 minutes.
6- Centrifuge at 13000 rpm for 5 minutes. Transfer the supernatant into a spin column.
7- Centrifuge at 13000 rpm for 1 minutes. Discard the flow through.
8- Add 650 µl of W buffer (check to ensure you have added ethanol) to the column , centrifuge at 13000 rpm for 1 minut. Discard the flow through.
9- Centrifuge the empty column at 13000 rpm for 1 minut to remove residual EW completely.
10- Place the spin column in a clean microcentifuge tube, add 30-100 µl of E buffer or distilled water directly to the center of the column matrix. Incubate the column at room temprature for 1 minute. Centrifuge the column at 12000 rpm for 1 minute to elute DNA. The isolated plasmid DNA is ready to use or can be stored at -20°C.

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