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

PGA Plasmid purification Kit

Catalog No. PL240-050 **Quantity: 50/25 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 μg of binding capacity and high purity
No use of organic solvents
Ready for use in fluorescent sequencing, cloning, hybridization, Electroporation and other enzymatic manipulation

for more information

Component list

	50 preps	25 preps
column	50	25
Collection tube	50	25
Buffer R - Cell Resuspension Buffer	12 ml	6
Buffer L - Cell Lysis Buffer	14 ml	7
Buffer N - Neutralization Buffer	20 ml	10
Buffer EW - Column Wash Buffer	26 ml	13
Buffer W - Column Wash Buffer	4 ml	2
Buffer EB - Elution Buffer	6 ml	3
RNase A (10 mg/ml)	50 µl	30

Storage: RNase A at -20oC for one year; others at room temperature (15-25^{o}C) for one year

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.

Address: No.14- Hemmat technology complex- Hemmat highway- Tehran
e-mail:pouyagene@gmail.com tell: 02140443676-7 whats app-telegram: 09101438051 website:ww.pgazma.com

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 temperature for 2 minutes.
6- Centrifuge at 13000 rpm for 10 minutes. Transfer the supernatant into a spin column.
7- Centrifuge at 13000 rpm for 1 minutes. Discard the flow through.
8- Add 500 µl of EW buffer to the column, centrifuge at 13000 rpm for 1 minute. Discard the flow through. (optional: When working with *endA*+ strains, endonucleases can be efficiently removed by optional wash step with buffer EW to ensure that plasmid DNA is not degraded during storage or enzyme reactions.)
9- Add 500 µl of W buffer (check to ensure you have added 16 ml ethanol) to the column, centrifuge at 13000 rpm for 1 minute. Discard the flow through.
10- Centrifuge the empty column at 13000 rpm for 1 minute to remove residual EW completely.
11- Place the spin column in a clean microcentifuge tube, add 30-100 µl of EB buffer or distilled water directly to the center of the column matrix. Incubate the column at room temperature 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.

The genotype of various *E.coli* strains

***EndA*$^+$ strains**	***EndA*$^-$ strains**
BL21(DE3), CJ236, HB101, JM83, JM101, JM110, LE392, MC1061, NM series, P2392 PR series, RR1, TB1, TG1, BMH71-18, ES1301, wild-type and etc.	DH1, DH20, DH21, DH5α, JM103, JM105, JM106, JM107, JM108, JM109, MM294, SK1590, SRB, XL1-Blue, XLO and etc.

For Research Use Only

Address: No.14- Hemmat technology complex- Hemmat highway- Tehran
e-mail:pouyagene@gmail.com tell: 02140443676-7 whats app-telegram: 09101438051 website:ww.pgazma.com