




Oct 11, 2022

# Plasmid Miniprep for 2022

 Forked from [Plasmid Miniprep](#)**Team Fudan iGEM<sup>1</sup>**<sup>1</sup>Fudan University1 *Works for me* Share[dx.doi.org/10.17504/protocols.io.dm6gpjwdpgzp/v1](https://dx.doi.org/10.17504/protocols.io.dm6gpjwdpgzp/v1)

2022

**Team Fudan iGEM**  
Fudan University

## ABSTRACT

Plasmid extraction and purification, based on Vazyme Mini-prep Kit manual.

## DOI

[dx.doi.org/10.17504/protocols.io.dm6gpjwdpgzp/v1](https://dx.doi.org/10.17504/protocols.io.dm6gpjwdpgzp/v1)

## PROTOCOL CITATION

Team Fudan iGEM 2022. Plasmid Miniprep for 2022. **protocols.io**  
<https://dx.doi.org/10.17504/protocols.io.dm6gpjwdpgzp/v1>



## FORK NOTE

## FORK FROM

[Forked from Plasmid Miniprep, Joshua Timmons](#)

## LICENSE

————— This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

## CREATED






Oct 10, 2022

## LAST MODIFIED

Oct 11, 2022

## PROTOCOL INTEGER ID

71085

- 1 Pellet bacteria culture in a 1.6mL centrifugation tube at 13,000rpm for 1 minute. Decant supernatant. The pellet in the tube can be stored in -20 freezer if time not enough for the following steps.
- 2 Add 250uL of resuspension solution (P1 with RNase) and vortex. After adding RNase into the P1, P1 is stored in 4 degree refrigerator.
- 3 Add 250uL of lysis solution (P2) and invert gently 4-6 times. P2 contains NaOH, and must keep tightly closed.
- 4 Add 350uL of neutralization solution (P3) and invert gently 4-6 times. Do not vortex, which will break bacteria genomic DNA and genomic DNA fragments will contaminate purified plasmids.
- 5   
Spin at 13,000rpm for 10 minutes, at 4 degree.
- 6 Take the clear supernatant, without any white protein cloud. Bind the DNA to the column by decanting.
- 7 Centrifuge at 13,300 rpm for 1 minute.  
 00:01:00
- 8 Wash the column with 600uL of wash solution (PW2) and centrifuge for 1 minute. Remind adding pure ethanol into PW2 as indicated on the bottle.  
 00:01:00
- 9 Discard the flow-through, wash again with 600uL of PW2, and centrifuge for 1 minute. Discard<sup>3m</sup> the flow-through and centrifuge the column again for 2 minutes.  
 00:03:00
- 10 Keep the cap open and wait until no ethanol smell. Move the column into a new centrifugation tube. Elute the purified DNA with 50uL of elution buffer (TE; 10 mM Tris-Cl, 1 mM EDTA). Then, centrifuge for 1 minutes. Collect the flow-through, which is the plasmid DNA. Because pET28 based is low-copy plasmid, pre-warm TE to 50 degree helps the elution.  
 00:01:00