

Plasmid Isolation

Introduction

Once transformation has been successful it is common to create a liquid culture for further research. Follow this protocol for creating plasmid isolation from your liquid culture.

Protocol for GeneJET Plasmid Miniprep Kit.

Source: <https://www.protocols.io/view/plasmid-isolation-miniprep-protocol-for-genejet-pl-7j4hkqw>

Materials

- Bunsen burner and matches
- Sterile LB-media
- Liquid culture
- Eppendorf tube
- GeneJET Plasmid Miniprep Kit: K0502: Thermo Fisher

Procedure

1. Centrifuge overnight culture at 4700rpm for 5 minutes and discard the supernatant. (2ml tubes per culture)
2. Add 250 μ L Resuspension solution and resuspend the cells in this. Transfer the mix to an Eppendorf tube.
3. Add 250 μ L Lysis solution and invert the tube 4-6 times.
4. Add 350 μ L Neutralization solution and invert the tube 4-6 times.
5. Centrifuge for 5 minutes and transfer the supernatant to a GeneJET spin column tube.
6. Centrifuge for 1 minute. Empty the flowthrough and place the column back in the collection tube.
7. Add 500 μ L Wash buffer and centrifuge for 1 minute. Discard the flowthrough and place the column back.
8. Repeat step 7.
9. Centrifuge for an additional minute to remove all residual ethanol. Place the column in a fresh Eppendorf.
10. Add 20 μ L of either an Elution buffer or MilliQ to the column and incubate at room temperature for 1 minute.
11. Centrifuge the column for 1 minute.
12. Discard the column and store the purified DNA in -20°C .