**Zymo DNA MiniPrep Plus Extraction Protocol**

Written by M. Studivan

Updated: 07.28.2022 M. Studivan

All centrifugation steps are performed at **room temperature** and **16,000 x *g*** unless specified.

Prior to first use, add 1040 µl Proteinase K Storage Buffer to each Proteinase K (20 mg) tube. The final concentration of Proteinase K is ~20 mg/ml. Store at -20ºC after mixing.

1. Transfer a tissue fragment to a new 2.0 mL tube and add 300 µL of Zymo Shield.
2. Add 150 µl Solid Tissue Buffer (blue) and 10 µl Proteinase K.
3. Vortex for 10-15 sec and incubate at 55ºC for 1 – 3 hr or until tissue solubilizes.
4. Centrifuge lysate for 1 min, then transfer 400 µL supernatant to new 2.0 mL tube.
5. Add 1 volume Genomic Binding Buffer (400 µL) to the sample and vortex 10-15 sec.
6. Transfer to a Zymo-Spin IIC-XLR Column in a collection tube and centrifuge for 1 min. Transfer spin column to a **new** **collection tube**.
7. Add 400 µl DNA Pre-Washto the column and centrifuge for 1 min. Discard the flow-through.
8. Add 700 µL g-DNA Wash Buffer to the column and centrifuge for 1 min. Discard the flow-through.
9. Add 200 µL g-DNA Wash Buffer to the column and centrifuge for 1 min. Transfer spin column to a new 1.5 mL tube.
10. To elute DNA, add 50 µL of DNA Elution Buffer directly to the column, incubate for 5 min, and centrifuge for 1 min.
11. Store on ice for purification.

**Zymo DNA Clean & Concentrator-5 Purification Protocol**

Written by M. Studivan

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All centrifugation steps are performed at **room temperature** and **16,000 x *g*** unless specified.

Prior to first use, add ethanol to buffer concentrates per instructions on bottles.

1. Add 2 volumes (100 µL) of DNA Binding Buffer to each sample and mix by vortexing.
2. Transfer to Zymo-Spin Columns and centrifuge for 30 sec. Empty flow-through.
3. Add 200 µL of DNA Wash Buffer to the column and centrifuge for 30 sec. Empty flow-through and **repeat this step.** Transfer spin column to a new 1.5 mL tube.
4. Add 20 µL of DNase/RNase-Free Water directly to the filter and incubate for 1 min. Centrifuge for 30 sec.
5. Transfer purified DNA to a 0.5 mL tube and store at -80 ºC.

**MiniPrep Plus Tube Prep: DNA Clean & Concentrator Tube Prep:**

2.0 mL tubes with 300 µL Zymo Shield Zymo Spin Column w/ collection tube

2.0 mL tube for homogenate 1.5 mL catch tube

Zymo-Spin IIC-XLR Column w/ collection tube 0.5 mL Safe-Lock tube

New collection tube

1.5 mL catch tube