Fast genomic DNA extraction from A. niger

Introduction

Purpose to extract genomic DNA from cells of *A. niger*.

Materials

- 5M NaCl
- 400 µL EtOH 96% (ice-cold)
- Lysis Buffer
 - o 3.75 mL Buffer A
 - o 3.75 mL Buffer B
 - o 1.5 mL 5% Sarkosyl
 - o 1 mL 1% PVP
- Breaking Buffer + Lithium Acetate
 - o 2% trition x-100
 - o 1% SDS
 - o 100mM NaCl
 - o 10mM TrisHCL
 - o 1mM EDTA
 - o 200mM LiAc
- Glass beads

Procedure

- 1. Mix the following in a FastPrep tube: scrape from plate colony + $500 \mu L$ Lysis buffer (or breaking buffer + LiAc) + $200 \mu L$ of small glass beads.
- 2. Place the tube in the FastPrep machine at speed 4 for 40 seconds.
- 3. Spin down in table-top centrifuge and transfer 150 µL of the supernatant to a new tube.
- 4. Add 15 μ L of 5M NaCl and 400 μ L ice-cold EtOH 96% and vortex.
- 5. Spin 3 minutes at 10,000 g.
- 6. Remove supernatant.
- 7. Dry tubes on heating block (50°C) .
- 8. Add $200 \mu L$ water and vortex.
- 9. Optional: Spin down and transfer 150 µl to a new tube (can give a cleaner solution).