

DNA EXTRACTION (A. Chistoserdov)

1. To the thawed and shredded filter membranes add:
 - 0.5 mL of 10% SDS
 - 250 μ L of Proteinase K (10 mg/mL)
2. Incubate at 50 $^{\circ}$ C for 10'.
3. Freeze at -80 $^{\circ}$ C for 15'.
4. Repeat 2 and 3 twice \rightarrow total of 3 times.

Phenol-Chloroform extraction

5. To the sample add 1 vol of water saturated phenol solution
6. Vortex until you have a milky-like consistency.
7. Centrifuge at 5000 rpm for 5' at 4 $^{\circ}$ C.
8. There should be two layers \Rightarrow carefully remove the upper layer by aspiration, transfer the supernatant to a fresh tube.
9. To the treated mix add 1 vol of chloroform. Vortex briefly.
10. Centrifuge at 5000 rpm for 15' at 4 $^{\circ}$ C.
11. Remove supernatant as in 8 and transfer to fresh tube.

PRECIPITATION

12. To the sample add
 - 1/10 vol of NaAc 3M
 - 2 vol of chilled 100% EtOH
13. Vortex VIGOROUSLY \rightarrow 30" each tube.
14. Freeze at -80 $^{\circ}$ C for at least 2 h, or overnight.
15. Without melting, centrifuge at 10000 rpm for 45'.
16. Remove and STORE supernatant for possible recovery.
17. Spin again BRIEFLY and remove any remaining liquid.
18. Wash pellet with 2 mL of 70% EtOH \rightarrow move liquid CAREFULLY around the walls. Spin BRIEFLY. Remove any remaining liquid.
19. Dry pellet at room temperature until there's no EtOH left \rightarrow MAKE SURE the tubes don't smell like EtOH.
20. Dissolve the pellet in 100 μ L of sterile HPLC grade water. If pellet doesn't dissolve add another 100 μ L.