

**Total RNA prep. by TRIzol**  
Invitrogen cat. # 155596-018

**NOTE: Wear gloves at all times, use fresh tip boxes, new bag of microfuge tubes and all solutions should be RNase free.**

1. Grind freeze dried mycelia with blue pipette tip.
2. In new microfuge tube, aliquot 50 $\mu$ L volume of ground mycelia powder
3. Add equal volume of acid-washed glass beads (particle size 425-600  $\mu$ m) to each tube
4. Continue to grind with blue tip to a fine powder
5. Add 1mL of TRIzol reagent to each tube and vortex immediately for ~ 1 min.
6. Incubate at 15-30 $^{\circ}$ C for 5 min.
7. Add 200 $\mu$ L of Chloroform (per 1mL of TRIzol used)
8. Shake vigorously for 15 sec.
9. Incubate at 15-30 $^{\circ}$ C for 2-3 min.
10. Centrifuge at 12,000xg for 15 min at 2-8  $^{\circ}$ C
11. Transfer clear supernatant to new microfuge tube
12. Add 200 $\mu$ L of Chloroform (per 1mL of TRIzol used)
13. Shake vigorously for 15 sec.
14. Incubate at 15-30 $^{\circ}$ C for 2-3 min.
15. Centrifuge at 12,000xg for 15 min at 2-8  $^{\circ}$ C
16. Transfer clear supernatant to new microfuge tube
17. Add 600 $\mu$ L Isopropanol(per 1mL of TRIzol used)
18. Mix by inversion and Incubate 15-30 $^{\circ}$ C for 10 min
19. Centrifuge at 12,000xg for 10 min at 2-8  $^{\circ}$ C
20. Discard supernatant
21. Wash pellet with 1mL 70% EtOH (per 1mL of TRIzol used)  
**note: Ethanol should be made with DEPC H<sub>2</sub>O**
22. Vortex
23. Centrifuge at 7,500xg for 5 min at 2-8  $^{\circ}$ C
24. Discard supernatant
25. Air dry under hood for 15-20 min.  
**note: Do Not dry completely because solubility is decreased**  
**Do Not dry by centrifugation under vacuum**
26. Resuspend pellet in 100 $\mu$ L DEPC H<sub>2</sub>O
27. Incubate in 65  $^{\circ}$ C water bath for 5 min to completely dissolve RNA

Yield: 5-10 $\mu$ g/ $\mu$ L RNA