PicoPure RNA Isolation Kit

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Note before starting:

- Pre-heat block to 42C
- Pre-make DNAse treatment master mix (1.1n)

Component	Volume	MM volume
DNAse I Stock DNA Disgestion Buffer	$5 \mu L$ $35 \mu L$	

Protocol

- 1. Extract cells with 100 μ L of Extraction Buffer (XB)
 - Resuspend the cell pellet gently by pipetting
 - DO NOT VORTEX
- 2. Incubate at 42C for 30min
- 3. Centrifuge sample at 3000xg for two minutes
- 4. Collect supernatant
 - Can stop here and freeze RNA at 70C
- 5. Pre-condition the RNA Purification Column
 - Add 250 μ L Conditioning Buffer onto the purification column filter membrane
 - Incubate RNA Purification Column with CB for 5min at RT
 - Centrifuge purification column at 16000xg for 1 min
- 6. Pipette 100 μ L of 70% Ethanol (EtOH) into cell extract
 - Mix well by pipetting
 - DO NOT VORTEX
- 7. Add cell extract to column
- 8. Centrifuge column for 2 minutes at $100 \times g$ and then $16000 \times g$ for 30s
- 9. Pipette 100 μ L Wash Buffer 1 (W1) into the purification column and centrifuge for 1min at 8000 x g
- 10. Add 40 μ L of DNAse treatment master mix to purification tube
- Add directly onto membrane
- 11. Incubate at RT for 15 min

- 12. Pipette 40 μ L Wash Buffer 1 (W1) onto purification column membrane and centrifuge at 8000 x g for 15 seconds
- 13. Pipette 100 μ L Wash Buffer 1 (W2) into purification column membrane and centriguge for one minute at 8000 x g
- 14. Pipette 100 μ L Wash Buffer 1 (W2) into purification column membrane and centriguge for two minutes at 16000 x g
 - Check if any wash buffer remains in column and centrifuge again at $16000~\mathrm{x}$ g for one minute to clear all the liquid
- 15. Transfer purification column to new 0.5mL tube
 - Insert purification column/0.5mL assembly into 1.5mL tube for centrifugation
- 16. Pipette EB directly onto membrane of the purification column
 - Gently touch tip to surface of membrane to ensure maximum absorption of EB into membrane
 - Use 11 μL to 30 μL EB
- 17. Incubate purification column for one minute at room temperature
- 18. Centrifuge column for one minute at 1000 x g to distribute EB in column
- 19. Centrifuge column for one minute at 16000 x g to elute RNA
- 20. Start RT immediately or store at -80C until use