














Apr 08, 2019

Working

## RNA isolation for tissue

Version 3

Chin Yee Tan<sup>1</sup><sup>1</sup>Duke University[dx.doi.org/10.17504/protocols.io.zvqf65w](https://doi.org/10.17504/protocols.io.zvqf65w) Chin Yee Tan 

- 1 Homogenization in TriZol  
Add 1ml  **1 ml Trizol** per  **30 mg tissue** and homogenize using handheld homogenizer.
- 2 Incubate at RT for  **00:05:00** to allow nucleoprotein complexes to dissociate.
- 3 Add  **200 µl Chloroform** carefully, and vortex to mix well.
- 4 Spin down at max speed in a chilled centrifuge for  **00:15:00**.
- 5 Carefully remove the top aqueous phase and transfer to a new Eppendorf tube. The interphase and bottom organic phase can be saved for DNA and protein respectively.
- 6 To the aqueous phase, add  **500 µl** of 100% isopropanol, mix by inversion and incubate at  **-20 °C** for a minimum for  **02:00:00**.
- 7 Spin down at max speed for  **00:30:00** to precipitate RNA.
- 8 Remove supernatant, and add  **1 ml 75% Ethanol** to wash the pellet.
- 9 Spin down at max speed for  **00:15:00** and remove supernatant.

10 Resuspend pellet in appropriate volume of nuclease free water.



This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited