RNA isolation for tissue V.3

Chin Yee Tan¹

¹Duke University

Chin Yee Tan

VERSION 3

APR 08, 2019

OPEN ACCESS

DOI:

dx.doi.org/10.17504/protocols.io.zvqf65w

Protocol Citation: Chin Yee Tan 2019. RNA isolation for tissue. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.zvqf65w>

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

Protocol status: Working
We use this protocol and it's working

Created: Apr 08, 2019

Last Modified: Apr 08, 2019

PROTOCOL integer ID:
22160

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.