RNA Isolation for Tissue using TRIzol V.1

Sze-Xian Lim¹

¹Duke University

Sze-Xian Lim

VERSION 1

APR 08, 2019

OPEN ACCESS

DOI:

dx.doi.org/10.17504/protocols.io.zvzf666

Protocol Citation: Sze-Xian Lim 2019. RNA Isolation for Tissue using TRIzol.

protocols.io

<https://dx.doi.org/10.17504/protocols.io.zvzf666>

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: In development

We are still developing and optimizing this protocol

Created: Apr 08, 2019

Last Modified: Apr 08, 2019

PROTOCOL integer ID:

22165

1 Add 1 mL TRIzol per 30 mg tissue and homogenize using handheld homogenizer.

- 2 Incubate at 25 °C for 00:05:00 to allow nucleoprotein complexes to dissociate.
- 3 Add 200 µL chloroform (20 % volume TRIzol) carefully and vortex to mix well.
- 4 Centrifuge at max speed for 00:15:00 at 4 °C .
- 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 Add 500 µL 100% isopropanol to the aqueous phase, mix by inversion and incubate at -20 °C for a minimum of 02:00:00 .
- 7 Spin down at maximum speed for 30 mins to precipitate RNA.
- 8 Remove supernatant, and add 1 mL of 75 % volume ethanol to wash pellet.
- 9 Spin down at max speed for 15 minutes and remove supernatant.

10 Resuspend pellet in appropriate volume of nuclease free water.