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Jul 07, 2020

Phenol-chloroform extraction and ethanol precipitation of RNA

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ABSTRACT

Based on the protocol form NEB HiScribe™ T7 High Yield RNA Synthesis Kit

EXTERNAL LINK

<https://www.neb.com/-/media/catalog/datacards-or-manuals/manuale2040.pdf>

THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

New England Biolabs HiScribe™ T7 High Yield RNA Synthesis Kit Instruction Manual

DOI

dx.doi.org/10.17504/protocols.io.rzvd766

PROTOCOL CITATION

Tomasz Suchan 2020. Phenol-chloroform extraction and ethanol precipitation of RNA. **protocols.io**
dx.doi.org/10.17504/protocols.io.rzvd766

MANUSCRIPT CITATION please remember to cite the following publication along with this protocol

New England Biolabs HiScribe™ T7 High Yield RNA Synthesis Kit Instruction Manual

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CREATED

Jul 26, 2018

LAST MODIFIED

Jul 07, 2020

PROTOCOL INTEGER ID

14101

PARENT PROTOCOLS

In steps of

[hyRAD RNA probes preparation and capture](#)

[hyRAD RNA probes preparation and capture](#)

MATERIALS

| NAME | CATALOG # | VENDOR |
|--------------------------------------|-----------|--------|
| Ethanol 100% | | |
| Ethanol 70% [Note: freshly prepared] | | |
| nuclease free water | | |
| sodium acetate 3M solution | | |
| EDTA 0.1 mM | | |

- 1 Adjust the reaction volume to 180 µl by adding 160 µl nuclease-free water. Add 20 µl of 3 M sodium acetate, pH 5.2 or 20 µl of 5 M ammonium acetate (1/10 of the total volume), mix thoroughly.
- 2 Extract with an equal volume (200 µl) of 1:1 phenol/chloroform mixture. Vortex and centrifugate at maximum speed for 5 min.
- 3 Collect the aqueous (upper) phase and transfer to a new tube.
- 4 Repeat steps 2 and 3.
- 5 Precipitate the RNA by adding 2 volumes of -20°C 100% ethanol. Incubate at -20°C or on dry ice for at least 30 minutes.
- 6 Collect the pellet by centrifugation at 4°C for 30 min.
- 7 Remove the supernatant and rinse the pellet with 500 µl of cold 70% ethanol.
- 8 Quick spin and collect the last drop of ethanol.
- 9 Dry the sample.
- 10 Resuspend the RNA in 50 µl of 0.1 mM EDTA. Store the RNA at -20°C or below.