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¹In-house protocol

Works for me

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Eadewunm

ABSTRACT

RNA Integrity Check: Modification of Protocol from Qiagen

© RNA Integrity Check V.1

PROTOCOL CITATION

Elizabeth Fozo 2020. RNA Integrity Check. protocols.io https://protocols.io/view/rna-integrity-check-bpwjmpcn

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44715

SAFETY WARNINGS

Formamide and formaldehyde are toxic and dangerous chemicals. Handle with care in the hood!

DISCLAIMER:

DISCLAIMER: This is a work in progress.

ABSTRACT

RNA Integrity Check: Modification of Protocol from Qiagen

BEFORE STARTING

Pretreat gel containers and gel flask with RNase Zap

RNA Integrity Check

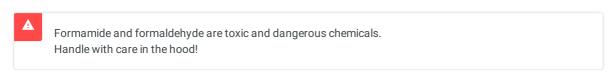
- Determine the concentration of RNA; ideally want to run approximately 📮 1 µg of RNA on the gel (should be about
 - ■1 µl of your sample)
- Spray gel tray, comb, damns, and a small flask with RNAse Zap.
- For small gels, melt 0.3 grams of RNA ONLY agarose in 30 ml 1X TBE (or 1X TAE) to the cleaned flask (for a 1% gel using Horizon gel boxes. If using something else, adjust accordingly).

- Let the solution cool slightly, add let solidify.
 For samples:

 RNA sample in a total of let μ of water (if RNA concentration is about let μg /ml , add let ημ of RNA to let ημ of RNAse-free water)
 μ μ of sample buffer
 Μix samples

 Sample Buffer (make FRESH!)

 let θ μ of concentrated dye (80% glycerol, 0.2% bromophenol blue, 0.2% xylene cyanol; this does NOT need to be made fresh!)
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- 6 Load gel and include a 1 kb DNA ladder for size approximation; run at 100 volts about 45-60 minutes
- 7 Gel: should see 2 distinct bands corresponding to the 16s and 23s rRNA species. If RNA is intact, will not see smearing.
 Should also see lots of tRNA at the bottom.



On occasion, I have run a mini-1X MOPS gel to validate RNA integrity especially if I do not have much sample left and really needed to use the RNA for an important experiment.