

RNA extraction lab report

Name: _____

- A. Paste an image of your RNA gel indicating the location of your sample, the size of the fragments in the DNA ladder and the location of the different ribosomal subunits. Show on the gel the presence of degraded RNA, if visible. Compare the concentration of your sample with the class average and explain what could have caused this effect.

B. Provide two potential sources or reasons for RNA degradation and describe how degraded RNA would look like on an agarose gel.

C. Can you assess RNA integrity exclusively with spectrophotometric (concentration, 260/280 and 260/230 ratios) data? Explain.

- D. What do you think is the function of the bleach in the agarose gel (see: <https://pubmed.ncbi.nlm.nih.gov/22222980/>)? Give an alternative for another type of gel that would give similar (or better!) results than the one you just used.

- E. Why is RNA integrity so important for downstream applications? Give one example of a technique that relies on high quality RNA.