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RNA concentration measurement and non-denaturing agarose gel electrophoresis

PLOS One

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ABSTRACT

RNA concentration measurement and non-denaturing agarose gel electrophoresis

MATERIALS

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NanoDrop™ 2000c Spectrophotometer Thermo Fisher Scientific Catalog
#ND-2000C

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

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- 1
 - Allow RNA to thaw on ice
- 2
 - Determine RNA concentration using a NanoDropTM 2000/2000c Spectrophotometers (Nucleic Acids – RNA mode, 2 µL sample size)
- 3
 - Determine RNA purity from protein contamination by assuring 260/280 ratio is ~2.0
- 4
 - Determine RNA integrity and purity from genomic DNA contamination by electrophoresis. Load 400 ng RNA onto a 1% agarose gel with ethidium bromide (EtBr) in TBE buffer and run at 70 V until the dye line is approximately 75-80% of the way down the gel.
- 5
 - Visualize and document using a gel UV imaging/documentation system