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

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# Agarose gel for RNA and DNA

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ABSTRACT

General method for running agarose gels for RNA and DNA samples

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## Preparing the agarose gel and plate

4m 30s

1 1 g agarose in 100 mL of TAE (Tris-Acetate-EDTA) buffer, 1x **Contributed by users**

2 Microwave solution in a flask for 00:03:00 until the agarose is dissolved. Microwave for 4m 30s 00:01:00 thereafter 00:00:30

3 Allow to cool before adding 1 µL Ethidium bromide, 10mg/mL, 10mL **Amresco Catalog #X328-10ML** in the gel medium before completely cool. Then pour into the gel mold

3.1 Make sure that your plate is balanced and the teeth are in. Decide if you need a long ladder or a short weather.

## Preparing the chamber

4 Add 5 µL Ethidium bromide, 10mg/mL, 10mL **Amresco Catalog #X328-10ML** in the gel medium within the chromatography chamber

## Preparing RNA samples

5m

5 250-300 ng /RNA per sample C1.V1 = C2.V2

V1 = (10)(50)/RNA conc. (from nanodrop)

Add the V1 sample of RNA to 1:1 ratio of

RNA Loading Dye (2x) - 4.0 ml **New England Biolabs Catalog #B0363S** to each sample

6 Heat up the ladder RiboRuler High Range RNA Ladder **Thermo Fisher Catalog #SM1821** 5m

and RNA samples to 70 °C for 00:05:00 for the gel

## Preparing DNA samples

7 SyberSafe DNA Gel Stain **Invitrogen - Thermo Fisher Catalog #S33101** is already in the samples for the PCR; then use the

GeneRuler 1 kb Plus DNA Ladder **Thermo Fisher Catalog #SM1331**

## Setting up the sample gels 1h 50m

8 Add 5 µL of ladder and samples to gel wells

9 For RNA: 80V for 01:00:00 1h 40m

For DNA: 80V for 00:40:00

10 *Note: can check gel after 00:10:00 to see if there is product showing on the gel 10m