**Qubit Broad Range RNA Quantification Protocol**

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1. Thaw Qubit Standards at room temperature.
2. Label the required number of 0.5 mL Qubit tubes, including 2 tubes for standards.
3. Prepare the Qubit working solution by diluting the BR Reagent 1:200 in Buffer. To calculate the total volume required, multiply the number of tubes by 200 µL.
4. Optional: Use the **Reagent Calculator** on the Qubit 4.0 to determine the Qubit working solution dilution and total volume.
5. Add 190 µL of Qubit working solution to each of the standard tubes.
6. Add 10 µL of each Qubit standard to the respective tube, then mix by vortexing 2–3 sec.
7. Add 199 µL of Qubit working solution to each of the sample tubes.
8. Add 1 µL of each sample extract to the respective tube, then mix by vortexing 2–3 sec.
9. Incubate all tubes at room temperature for 2 min.
10. On the Qubit 4.0, select the **assay type** (RNA: Broad range).
11. Select **Read standards**. Insert standard 1, then select Read standard. Repeat for standard 2.
12. Select **Run samples**, select a sample volume of 1 µL, and set the output concentration to ng / µL.
13. Insert a sample tube and select **Read tube**. The screen will display the original concentration, as well as the diluted concentration. Repeat for all remaining samples.
14. With the USB inserted, select **Data**, then select and **Export** the dataset as csv.

**Qubit Tube Prep:**

0.5 mL Qubit assay tubes (+2 for standards)

15 mL Falcon tube for Qubit working solution