

Materials needed:

- Protein or DNA Kit (Life Technologies)
- 0.5 mL PCR tubes
- Qubit 2.0 Fluorometer

Protein or DNA quantification:

1. Set up 3 assay tubes (for standards) and 1 assay tube for each sample that will have quantification performed. Make sure labeling is on lid- as fluorometer reads through the walls of the tube.
2. Prepare Qubit working solution by making a reagent:buffer solution at a 1 μ L:200 μ L ratio. Keep in mind that 200 μ L of this working solution is needed for each standard and sample.
3. When making standards, mix 190 μ L of working solution, prepared in step 2, and 10 μ L of standard (which come with the kit.) Perform for each of the standards.
4. Vortex standards for 2-3 seconds and incubate for 5 minutes at room temperature if performing DNA quantification. If performing protein quantification, incubate for 15 minutes at room temperature before obtaining reading(s).
5. Select Protein Assay or DNA Assay on the Qubit 2.0 Fluorometer. Place standards in fluorometer and select "read standard". Repeat this for all standards.
 - 5.1. Once standards are made and read, the Qubit stores that information.
 - 5.2. If your study needs fresh standards, go ahead and make them. If your study does not need fresh standards, you can use the information that is stored in Qubit.
6. Prepare assay tubes for samples by adding 180 μ L-199 μ L of working solution and mixing 1 μ L - 20 μ L of sample. The total volume of working solution and sample should equal 200 μ L.
7. Vortex samples for 2-3 seconds and incubate for 5 minutes at room temperature if performing DNA quantification. If performing protein quantification, incubate for 15 minutes at room temperature before reading.
8. Select Protein Assay or DNA Assay on the Qubit 2.0 Fluorometer. Place samples in fluorometer and select read sample. Repeat this for all samples.