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DNA Quantification

Addgene The Nonprofit Plasmid Repository[1]

[1]Addgene

1 Works for me dx.doi.org/10.17504/protocols.io.4g8gtzw

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ABSTRACT

This protocol is for DNA quantification. To see the full abstract and additional resources, please visit https://www.addgene.org/protocols/dna-quantification/.

EXTERNAL LINK

https://www.addgene.org/protocols/dna-quantification/

1 Before measuring any samples, be sure to 'blank' the spectrophotometer using the solution the DNA is resuspended in, but with no DNA added. 'Blanking' measures the background inherent to the machine and your solvent.

2 If using a NanoDrop to measure your samples, place **1 µl** - **2 µl** of mini-prepped DNA onto the pedestal.

3 Close the lid and click measure, be sure to record the concentration and purity.

Note, purity is measured under the 260/280 column (A good purity ranges from 1.80-2.00).

4 Repeat for each sample.

Notes:

- Keep in mind that despite the accuracy of the NanoDrop, if two consecutive samples have significantly different concentrations, it is possible that the difference between them has affected the accuracy of the NanoDrop. It is a good idea to re-zero any spectrophotometer between samples if they are expected to vary significantly in concentration.
- DNA dissolved in water is going to have a greater variance in concentration readings than a DNA sample dissolved in buffer (such as TE). You will get much more accurate and consistent readings from DNA in a buffered solution.